

THE BOSTON Medical and Surgical JOURNAL

VOLUME 196

FEBRUARY 17, 1927

NUMBER 7

The Massachusetts Medical Society

PROCEEDINGS OF THE COUNCIL

STATED MEETING, FEBRUARY 2, 1927

A STATED MEETING of the Council was held in John Ware Hall, Boston Medical Library, February 2, 1927, at 11.30 o'clock a. m. The President, Dr. James S. Stone of Boston, was in the chair and the following 131 Councilors, and, by invitation: A. S. Begg, Stephen Rushmore, W. B. Cannon and P. E. Truesdale.

BARNSTABLE

W. D. Kinney

BERKSHIRE

Henry Colt
A. P. Merrill
J. B. Thomes

BRISTOL NORTH

W. H. Allen
F. A. Hubbard

BRISTOL SOUTH

E. F. Cody
E. F. Curry
T. F. Warren

ESSEX NORTH

E. S. Bagnall
J. Forrest Burnham
T. R. Healy
G. E. Kurth
F. S. Smith
F. W. Snow

ESSEX SOUTH

C. H. Phillips
F. W. Baldwin
J. A. Bedard
J. F. Donaldson
H. K. Foster
W. T. Hopkins
P. P. Johnson
A. N. Sargent
R. E. Stone
J. W. Trask

FRANKLIN

G. P. Twitcheil

HAMPDEN

E. P. Bagg, Jr.
J. M. Birnie
H. D. Gafney
E. A. Knowlton
A. G. Rice
J. P. Schneider

HAMPSHIRE

A. J. Bonneville
J. G. Hanson

MIDDLESEX EAST

R. R. Stratton
Richard Dutton
E. S. Jack
A. E. Small

MIDDLESEX NORTH

J. F. Boyle
W. B. Jackson
J. H. Lambert
J. A. Mehan
J. B. O'Connor
T. A. Stamas

MIDDLESEX SOUTH

E. A. Andrews
E. H. Bigelow
W. T. Burke
W. H. Crosby
D. F. Cummings
I. J. Fisher
C. B. Fuller
F. A. Higginbotham
H. J. Keane
Edward Mellus
C. E. Mongan
J. P. Nelligan
C. F. Painter
W. A. Putnam
J. W. Sever
E. H. Stevens
H. W. Thayer

NORFOLK

H. D. Arnold
F. J. Bailey
D. N. Blakely
W. L. Burrage
Samuel Crowell
F. S. Cruickshank
D. G. Eldridge
C. S. Francis
G. H. Francis

J. B. Hall
A. H. Hodgdon
I. R. Jankelson
G. W. Kaan
E. B. Lane
W. A. Lane
E. N. Libby
H. W. Martin
S. F. McKeen
Victor Safford
F. S. Schmidt
P. R. Withington

NORFOLK SOUTH

D. A. Bruce
O. H. Howe

PLYMOUTH

H. A. Chase
J. H. Drohan

SUFFOLK

E. P. Joslin
J. W. Bartol
M. E. Champion
David Cheever
A. L. Chute
F. J. Cotton
A. H. Crosbie
W. P. Cross
Lincoln Davis
W. H. Emsworth
Channing Frothingham
J. C. Hubbard
G. A. Leland

F. B. Lund
Donald Macomber
G. B. Magrath
L. S. McKittrick
J. H. Means
R. H. Miller
T. J. O'Brien
R. B. Osgood
Anna G. Richardson
Jane D. K. Sabine
D. D. Scannell
W. R. Sisson
J. J. Skirball
C. Morton Smith
J. S. Stone
E. W. Taylor
R. H. Vose

WORCESTER

W. F. Bowers
L. R. Bragg
G. A. Dix
G. E. Emery
M. F. Fallon
R. W. Greene
David Harrower
E. L. Hunt
A. G. Hurd
A. W. Marsh
G. O. Ward
F. H. Washburn
S. B. Woodward
W. E. Currier
A. F. Lowell

The minutes of the last meeting were read by the Secretary in abstract and, as no corrections or omissions were noted, they were accepted as read and as printed in the Proceedings in the *Journal*. The chair spoke feelingly of the loss the Society had received in the death of the President of the Franklin District Medical Society, Dr. Patrick Frank Leary, of Turners Falls, on January 21, last, at the age of 59, after a brief illness. He called on the chairman of the Committee of Arrangements, Dr. L. S. McKittrick to report on the detailed plans for the annual meeting of the Society at the Hotel Statler, Boston, on June 6, 7 and 8, next. The chairman explained that the new first day of the meeting involved clinics

at the hospitals with a luncheon there and in the afternoon the Fellows would go to the hotel, where there would be diagnostic clinics; they would be asked to meet the ladies at the Brookline Country Club and in the evening attend the "Pop Concert." Tuesday there would be meetings at the hotel, in the customary manner; the dinner would be on Wednesday in the middle of the day; the exhibits would be displayed at the hotel during the three days of the meeting. He asked for the coöperation of all the Fellows that this meeting might be one of the best ever held; he invited a careful discussion of the budget which would be submitted shortly by the Committee on Membership and Finance.

Dr. D. N. Blakely, Chairman, read the report of the Committee on Membership and Finance, on Membership, and it was accepted and its recommendations adopted by vote.

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE, ON MEMBERSHIP

The Committee on Membership and Finance makes the following recommendations as to membership:

1. At the last meeting of the Council, held October 6, 1926, there was nominated for honorary fellowship

Rowe, Allan Winter, B.S., Massachusetts Institute of Technology, 1901; M.S., Wesleyan, 1904; Ph.D., Göttingen, 1906. Assistant in Chemistry, Wesleyan, 1902-04; Swett Fellow, Massachusetts Institute of Technology, 1904-06; Lecturer, Boston University School of Medicine, 1906-08; Professor, 1908—; Harvard Graduate School, 1907-14; Member Evans Memorial Hospital, 1910—; Chief of Research, Evans Memorial Hospital, 1921—; Fellow American Association for Advancement of Science; Fellow American Physical Society; Senior Fellow in Biochemistry, Engineering-Economics Foundation, Member of Society American Bacteriologists, American Electro-Chemical Society, International Anesthesia Research Society, Chemical Societies of United States, England and France, Biochemical Societies of United States and France, American Physiological Society, Society for Experimental Biology and Medicine, Association for the Study of Internal Secretions, Academy of Medicine, Inc.

Dr. Rowe's work at the Evans Memorial and elsewhere is of great interest and value to physicians in some of their most complicated problems. Your Committee heartily recommends his election to honorary fellowship under the provisions of Chapter I, Section 4, of the By-Laws.

The Committee on Membership and Finance makes the following recommendations as to membership:

2. That the following named Fellow be allowed to retire under the provisions of Chapter I, Section 5, of the By-Laws:

1. Reynolds, Edward, Boston.

3. That the dues for 1927 of the following named three Fellows be remitted under the provisions of Chapter I, Section 6, of the By-Laws:

1. Parker, George Leonard, Philadelphia.
2. Ruble, Wells Allen, Watford, Herts, England.
3. Wilder, Edward Wheeler, Madura, South India.

4. That the following named six Fellows be allowed to resign, as of December 31, 1926, under the provisions of Chapter I, Section 7, of the By-Laws:

1. Blew, Edgar Maule, Allentown, Pa.
2. Gordon, John Hurter, Birmingham, Mich.
3. Hersey, Harold Waters, Bridgeport, Conn.
4. Holman, Marguerite, Jamestown, N. Y.
5. Stetson, Frank Eliot, South Dartmouth.
6. Worcester, George Franklin, Englewood, N. J.

5. That the following named four Fellows be deprived of the privileges of fellowship, under the provisions of Chapter I, Section 8, (a) and (b), of the By-Laws:

1. George, Leslie Handlin, Bradford.
2. Goldsberry, Paul Williams, Deerfield.
3. Maney, John Joseph, Lawrence.
4. Willey, Walter Brown, Jr., address unknown.

6. That the following named twenty-five Fellows be allowed to change their membership from one District Society to another without change of legal residence, under the provisions of Chapter III, Section 3, of the By-Laws:

Fourteen from Middlesex South to Suffolk

1. Bock, Arlie Vernon, Cambridge.
2. Casselberry, Clarence Marmaduke, Newton.
3. Consales, Peter Augustine, Somerville.
4. Eaton, Charles Alexander, Brighton.
5. Fraser, Somers, Cambridge.
6. King, Donald Storrs, Brighton.
7. Lee, Wesley Terence, Brighton.
8. Locke, Allen Winch, Auburndale.
9. Lourie, Osip Raphael, Brighton.
10. Lund, Charles Carroll, Brighton.
11. Perkins, George Edward, Watertown.
12. Stacey, Charles Franklin, Brighton.
13. Vose, Samuel Norton, Newton Center.
14. Young, James Herbert, Newton.

Nine from Norfolk to Suffolk

1. Ayer, James Bourne, Milton.
2. Hall, Francis Cooley, Brookline.
3. Mixer, Charles Galloupe, Brookline.
4. Skirball, Joseph Jacobs, Brookline.
5. Smith, Judson Arthur, Roxbury.
6. Solomon, Harry Caesar, Jamaica Plain.
7. Soutter, Robert, Brookline.
8. Sprague, Claire, Brookline.
9. Wight, Freeman Clark, Millis.

One from Plymouth to Middlesex South

1. Shirley, John Newton, South Duxbury.

One from Suffolk to Norfolk

1. Wheatley, Frank Edward, Milton.

DAVID N. BLAKELY, *Chairman.*

Previous to the adoption of the main report separate action was taken on the recommendation that Allan Winter Rowe, Ph.D., be elected an honorary member. On motion duly seconded, the Secretary was directed to cast one ballot for Dr. Rowe. He did so and the chair announced that Dr. Rowe had been duly elected an honorary member of the Society.

The Secretary read the reports of the committees previously appointed to consider the petitions for restoration to the privileges of fellowship and it was voted separately that each of the three following be restored provided he pay within one month of the date of this meeting whatever he owed the Society when he was de-

prived of the privileges plus the dues for the current year: C. E. Geary, W. F. Boos, W. R. Redden. A petition was read from A. H. Stockbridge of Lynn to be restored and the following committee appointed to consider it: J. A. Beard, W. T. Hopkins, N. P. Breed.

The President nominated and the Council appointed these delegates to the annual meetings of the New England State Medical Societies:

MAINE: F. W. Snow, P. R. Withington.
NEW HAMPSHIRE: Gerald Blake, J. F. Donaldson.
VERMONT: B. W. Paddock, R. L. DeNormandie.
RHODE ISLAND: C. M. Smith, Reginald Fitz.
CONNECTICUT: H. R. Nye, R. S. Benner.

Also, these delegates to the House of Delegates of the American Medical Association for two years from June 1, 1926:

H. G. Stetson, *alternate*, L. A. Jones; C. E. Mongan, *alternate*, Gilman Osgood; J. F. Burnham, *alternate*, A. R. Crandell.

And this delegate to the Annual Congress on Medical Education, Medical Licensure and Hospitals, at Chicago, February 14-16, 1927: C. F. Painter.

Dr. Blakely read the following report of the Treasurer:

TREASURER'S REPORT TO THE COUNCIL OF THE MASSACHUSETTS MEDICAL SOCIETY

Received from Annual Assessments and various small items \$33,259.16

REPORT OF COMMITTEE ON MEMBERSHIP AND FINANCE AS TO FINANCE
BUDGET FOR 1927

APPROPRIATIONS

Salaries:		
Secretary	\$2,500	
Treasurer	500	\$3,000
Expenses of Officers and Delegates:		
President and Vice-President	250	
Secretary	750	
Treasurer	400	
District Treasurers	1,500	
Censors	500	
Delegates to House of Delegates, A. M. A.	800	4,200
Rent, Boston Medical Library		1,200
Boston Medical and Surgical Journal		15,000
Malpractice Defense		2,000
Shattuck Lecture		200
Cotting Lunches		500
Committee Room Rent and Expenses		2,000
		\$28,100
Standing Committees:		
Of Arrangements for Annual Meeting	\$6,150	
Publications and Scientific Papers	200	
Membership and Finance	25	
Ethics and Discipline	25	
Medical Education and Medical Diplomas (including expenses of Delegate to annual congress at Chicago)	200	
State and National Legislation (including expenses of Delegate to annual congress at Chicago)	900	
Public Health	600	
Public Instruction	200	
		8,300
Dividends to District Societies		4,000
Total		\$40,400
Income as Estimated by Treasurer		37,000
To be taken from General Fund		\$3,400

DAVID N. BLAKELY, Chairman.

Received from interest on investments	3,766.55
Total Receipts	\$37,025.71
Total Expenses of Society paid by Treasurer (see detailed statement)	\$36,570.44
Balance carried forward	\$455.27

ARTHUR K. STONE,
Treasurer.

January 15, 1927.

The Secretary read this report of the Auditing Committee:

Your committee have examined the securities of the Massachusetts Medical Society and find them to be as scheduled in the accountant's report.

(Signed)
FRED R. JOUETT,
PAUL R. WITHINGTON,
Auditing Committee.

January 31, 1927.

On motion, duly seconded, both reports were accepted.

The letter of the certified public accountant, the statements and the reconciliation between the profit and loss and the budget were passed about. (See Appendix, Nos. 1 and 2.)

Dr. Blakely read the report of the Committee on Membership and Finance, on Finance, with the Budget for 1927.

The item of the budget having to do with the appropriation for the Committee of Arrangements excited considerable discussion. The question of expending such a large sum was debated; whether those who eat an annual dinner should pay all of the expense of such dinner; whether all of the expenses of transportation should be borne by the Society; how many are likely to attend. The following Councilors took part in the discussion: A. P. Merrill, L. Davis, C. M. Smith, C. Frothingham, E. Mellus, J. H. Lambert, R. B. Osgood, S. B. Woodward, D. Macomber, J. G. Hanson, J. H. Means, D. N. Blakely, L. S. McKittrick and the chair. Dr. McKittrick read in detail the budget that he had submitted to the Committee on Membership and Finance; Dr. Blakely explained that it was, of course, subject to change and that some of the appropriation of \$6,150 might be turned back in to the treasury. Dr. Osgood moved: That each member attending the meeting pay for his food and social entertainment, including that for the ladies. The motion was seconded but was lost on a voice vote. Dr. Frothingham moved: That the Committee of Arrangements be given an appropriation of \$2,500. This was not seconded. Finally after further discussion the original motion to adopt the report of the committee with the budget, as presented, was carried by a voice vote.

Dr. T. J. O'Brien read the report of the Committee on State and National Legislation. (See Appendix, No. 3.) It was adopted with applause and the chair amplified the report by emphasizing the dates of the hearings and the importance of the subjects that were covered. He asked the Vice-President, Dr. J. M. Birnie, a member of the Board of Registration in Medicine, to speak on the bill which would authorize that board to approve the medical schools, diplomas from which are accepted by candidates for registration. Dr. Birnie said that this year the Governor had expressed in his inaugural message a desire that the board be given such authority and was ready to use his influence to secure the passage of a bill. Dr. Birnie thought that every Fellow should help support the Governor, as the board very much needs power to eliminate the low grade schools, not only in Massachusetts but also in Canada, and Russia especially, graduates of which are appearing now in greater numbers for licenses to practise.

The chair stated that in accordance with the vote of the Council he had called two meetings of the representatives of the New England States and had effected an informal organization of a New England Medical Council, Dr. D. W. Parker, of New Hampshire, being President and Dr. W. P. Bowers, of Massachusetts, Secretary. He called on Dr. Bowers to speak on that subject. Dr. Bowers said that the New England Medical Council was a modification of a previous more ambitious plan, namely to form

a New England Medical Society; a plan which would encroach too much on the functions of the different individual State societies. Dr. Parker had appeared before the Council last June and again in October to outline what would be accomplished by a "Council." Both of the meetings of the delegates from the other States of New England had been most enthusiastic; they considered that New England is a unit in its ambitions in many directions; that at the second meeting there had been a discussion on the subject of insurance against suits for alleged malpractice. Dr. B. L. Bryant, Secretary of the Maine Medical Association, had given an account of the manner in which he handled threatened suits for malpractice by having agents in different parts of his state to interview the parties concerned, thus obviating, by means of those agents, the bringing of suits, and the taking care of the suits after they had been started. The "Council" thought that the member States might well adopt a similar procedure and form defence committees. It was decided that the States should appoint official representatives to the "Council," a voluntary body, also that the States should coöperate with the *Boston Medical and Surgical Journal* in printing their transactions. This proposition had been brought before the Committee of Nine, who had formulated a plan for such coöperation, involving the issue of one number a month of said journal at the rate to members of the States outside of Massachusetts of one dollar a year; such a rate would be feasible as the whole cost of the *Journal* to Fellows of the Massachusetts Medical Society has been \$3.04 a year.

Dr. Frothingham *Moved*, That the Council approves of the informal action that has been taken to organize the New England Medical Council. *Moved*, That the President and Secretary and three others to be appointed by the President, are authorized to represent the Massachusetts Medical Society at the meetings of the New England Medical Council. The motion, duly seconded was carried and the President appointed to act with the President and Secretary the following: W. P. Bowers, J. M. Birnie, Kendall Emerson.

Dr. Harrower *Moved*, That the President appoint a committee of three, subject to the approval of the Council, to be known as a "Defence Committee." It shall be the duty of this committee to consider all matters relating to actions pending or threatened against any member of the Society for alleged malpractice for the purpose of preventing injustice and also to attempt to adjust unwarranted misunderstandings which may exist with reference to the relations of a member with another physician in connection with possible or actual actions at law.

This committee shall appoint an auxiliary committee consisting of one or more members

from each of the District Medical Societies.

The motion was duly seconded. Dr. David Cheever, Chairman of the Committee on Ethics and Discipline, asked if the proposed motion would relieve his committee of the duty imposed on it by vote of the Council, at the October meeting, namely to "report definitely on the advisability of forming a Committee on Malpractice Defence." His committee had considered the matter and were getting all the facts in hand and were preparing to report at the annual meeting of the Council; he pointed out that the Society had had a committee on malpractice defence since the passage of the "Malpractice Act" in 1908, nearly nineteen years, a committee of two, the President and Secretary, that had handled malpractice matters successfully during that time: it did not seem to him that malpractice defence was within the province of his committee. Dr. J. H. Lambert thought it might be well to leave the matter in the hands of the Committee on Ethics. Dr. Mellus moved that the matter lie on the table until a report has been received from the Committee on Ethics. His motion being seconded was adopted by a show of hands.

In the absence of Dr. Homer Gage, Chairman of the Committee of Nine, the report for that Committee was made by Dr. J. W. Bartol. He presented a financial statement compiled by a certified public accountant for the year 1926 and stated that the affairs of the *Journal* were in a satisfactory condition. The unselfish devotion and untiring efforts of the Managing Editor, Dr. Walter P. Bowers, were referred to and it was set forth that tentative plans were being considered by certain of the other State medical societies in New England looking toward the adoption of the *Journal* as their official organ.

On motion by Dr. Bartol, duly seconded, it was *Voted*, To authorize the Committee of Nine to arrange through the Editor a plan for the adoption of the *Journal* as the official organ by certain of the State medical societies of New England.

It was moved, seconded and voted that the privileges of the floor be extended to A. S. Begg, S. Rushmore, W. B. Cannon and P. E. Truesdale.

Dr. C. F. Painter reported for the Committee on Medical Education and Medical Diplomas, in accordance with the vote of the Council in October. He read the resolutions on medical education, submitted by his committee last June, and the substitute resolutions offered by H. D. Arnold last October, both printed in the Proceedings of the Council. He disclaimed any intention of antagonizing anyone by the wording of his original resolution; he thought that the "general practitioner" is disappearing and believed that the trend of medical education tends to displace him; in his opinion scientific re-

search should not be in the undergraduate curriculum, but he did not criticize research in its proper place; fostering research unduly had a tendency to make specialists, rather than general practitioners. It was moved and seconded that the report of the committee, without the resolutions, be adopted, and it was so voted. As to passing the resolutions presented by the committee last June Dr. F. B. Lund took the floor. He considered that before passing the resolutions the Council should know what they mean; he had been Chairman of The Reference House of Delegates of the American Medical Committee on Medical Education of the Association in 1926; the subject is a large one. He analyzed the resolutions paragraph by paragraph; he thought that a clinician is not harmed if he knows some science; we cannot get the best men in medicine without scientific research; the general practitioner must have an outline of the specialties: the passage of the resolutions, he thought, would arm the low grade schools with ammunition against the schools of high grade; it would be a step backwards; they should not be passed. Dr. Lambert thought that medical education is such a technical problem that it should be handled by a committee of deans and professors of medical schools, not by a body such as this Council, which is not competent. He opposed the resolutions. Dr. Arnold agreed with Dr. Lambert, the questions of medical education, which he had studied for many years as a member of the standing committee of the Society on this subject, were far too abstruse to be settled by the Council; he had offered some substitute resolutions in October; the committee had come back with the original resolutions; he thought that the deans of the three good medical schools, who were present, would understand that the Society is interested; he moved and it was voted that the matter lie on the table.

The following letter relative to clinical research was read by the Secretary:

American Medical Association
535 No. Dearborn St., Chicago,
January 6, 1927.

Dr. Walter L. Burrage,
Brookline, Massachusetts.

Dear Doctor Burrage:

At a meeting of the Judicial Council recently held in Chicago, your letter addressed to the Council and received at this office on November 17, 1926, and the report of the Committee on Clinical Research to the Council of the Massachusetts Medical Society, were duly considered by the Council.

It was the opinion of the Judicial Council that as the matter of the attitude of the American Medical Association toward antivivisection in connection with clinical investigation has already been referred to the Board of Trustees and by that body to the Committee for the Protection of Medical Research, the Judicial Council should wait for the report of that committee.

Very truly yours,
(Signed) OLIN WEST.

Adjourned at 1.50 P. M.

WALTER L. BURRAGE, Secretary.

APPENDIX TO THE PROCEEDINGS OF
THE COUNCIL

NO. 1

The Massachusetts Medical SocietySTATEMENT FOR THE YEAR ENDED DECEMBER 31, 1926
January 19, 1927.Dr. F. R. Jouett, Dr. P. R. Withington,
Audit Committee, Massachusetts Medical Society,
Boston, Mass.

Gentlemen:

At the request of your Treasurer, Dr. Arthur K. Stone, we have audited the books and accounts of the Massachusetts Medical Society for the year ended December 31, 1926, and submit herewith the following statements:

Schedule A—Statement showing the Assets and Liabilities of the Massachusetts Medical Society, December 31, 1926.

Schedule B—Statement showing the Current Account of the Massachusetts Medical Society for the year ended December 31, 1926.

The cash on deposit in the banks has been reconciled with the bank statements and found to be correct. All known cash receipts have been properly accounted for, and cancelled checks were found supporting all disbursements.

The attached statement of Assets and Liabilities represents the true condition of the Society to the best of our knowledge and belief.

Respectfully submitted,

HARTSHORN AND WALTER,
Certified Public Accountants.

TREASURER'S REPORT

SHOWING THE ASSETS AND LIABILITIES OF THE MASSACHUSETTS MEDICAL SOCIETY
DECEMBER 31, 1926

SCHEDULE A

ASSETS

Cash:

New England Trust Company	\$8,282.68	
Old Colony Trust Company	1,733.44	
		\$10,016.12

Investments:

Shattuck Fund:		
Annuity Policy, Massachusetts Hospital Life Insurance Company	\$9,166.87	
Phillips Fund:		
Massachusetts 3½'s Gold Bonds	10,000.00	
Cotting Fund:		
Deposit in Institution for Savings in Roxbury and its vicinity	\$1,000.00	
Deposit in Provident Institution for Savings in the Town of Boston	1,000.00	
Deposit in Suffolk Savings Bank for Seamen and Others in Boston	1,000.00	
		3,000.00

Permanent Funds:

Deposit in Franklin Savings Bank in the City of Boston	1,074.48	
Par value		
\$5,200.00 Liberty Bonds 4th Issue 4½%	5,043.23	
5,000.00 Massachusetts 3½'s Bond 1938	5,000.00	
1,000.00 United States Steel Corporation 5's 1963	1,009.00	
2,000.00 United States Rubber Bonds 5's 1947	1,735.50	
2,000.00 American Sugar Refining Company 6's 1937	1,972.50	
2,000.00 Great Northern Railway Company 5½'s 1952	1,932.50	
2,000.00 Adirondack Power & Light Company 6's 1950	1,970.00	
4,000.00 Public Service Company, Northern Illinois 5's 1956	3,640.00	
3,000.00 Dayton Power and Light Company 5's 1941	2,797.50	
3,000.00 Toledo Edison Company 5's 1947	2,805.00	
3,000.00 Cedar Rapids Manufacturing and Power Company 5's 1953	2,805.00	
1,000.00 American Telephone and Telegraph Company 5½'s 1943	985.00	
3,000.00 Mallory Steamship Company 5's 1932	2,760.00	
3,000.00 Commonwealth of Australia 5's 1955	2,985.00	
3,000.00 United States Cold Storage Bonds 6's 1945	3,000.00	
3,000.00 Georgia Railway and Power Company 6's 1954	3,120.00	
3,000.00 Appalachian Electric Company 5's 1956	2,910.00	
3,000.00 Guaranty Title and Trust Company 5½'s 1936	3,000.00	
		72,711.58

The Boston Medical and Surgical Journal

1.00

Total \$82,728.70

LIABILITIES

Endowment Funds:

Shattuck Fund (G. C. Shattuck 1854, Balance 1866)	\$9,166.87	
Phillips Fund (Jonathan Phillips 1860)	10,000.00	
Cotting Fund (B. E. Cotting \$1,000.00—1876, 1881, 1887)	3,000.00	
		\$22,166.87

General Fund Account:

Balance, January 1, 1926	\$60,106.56	
Unexpended Balance for the year Ended December 31, 1926—Schedule B	455.27	
		60,561.83
Total		\$82,728.70

STATEMENT
SHOWING THE CURRENT ACCOUNT OF THE MASSACHUSETTS MEDICAL SOCIETY
FOR THE YEAR ENDED DECEMBER 31, 1926

SCHEDULE B

CREDIT

Assessments Received by District Treasurers:

Barnstable	240.00
Berkshire	832.00
Bristol North	431.00
Bristol South	1,528.00
Essex North	1,352.00
Essex South	1,893.00
Franklin	320.00
Hampden	1,880.00
Hampshire	464.00
Middlesex East	656.00
Middlesex North	865.00
Middlesex South	4,384.00
Norfolk	4,375.00
Norfolk South	536.00
Plymouth	792.00
Suffolk	5,673.00
Worcester	2,664.00
Worcester North	648.00
	<hr/>
	\$29,533.00

Assessments Received by Treasurer

3,720.00

Total

\$33,253.00

Income from Shattuck Fund

\$458.34

Income from Phillips Fund:

Massachusetts 3½'s Bonds 350.00

Income from Cotting Fund:

Interest—Institution for Savings in Roxbury and its vicinity	\$45.00
Interest—Suffolk Savings Bank for Seamen and Others in Boston	45.00
Interest—Provident Institution for Savings in the Town of Boston	42.50
	<hr/>
	132.50

Income from Permanent Funds:

Franklin Savings Bank	\$ 48.34
Liberty Bonds 4½ %	221.00
Massachusetts Bonds 3½'s	175.00
United States Rubber Company Bonds	100.00
United States Steel Company Bonds	50.00
American Sugar Company Bonds	120.00
Commonwealth of Australia	150.00
Great Northern Railway Company Bonds	110.00
Adirondack Light and Power Company Bonds	120.00
Cedar Rapids Manufacturing Company Bonds	150.00
Dayton Power and Light Company Bonds	150.00
Toledo Edison Company Bonds	150.00
Public Service Northern Illinois Company Bonds	200.00
Georgia Railway and Power Company Bonds	180.00
American Telephone and Telegraph Company Bonds	55.00
Appalachian Electric Company Bonds	75.00
Mallory Steamship Company Bonds	100.00
United States Cold Storage Bonds	180.00
	<hr/>
	\$2,334.34

Less,—Interest Advanced on Permanent Funds Purchased:

Mallory Steamship Company Bonds Purchased	\$30.56
Appalachian Power Company Bonds	10.42
Guaranty Title and Trust Company Bonds	17.42
	<hr/>
	58.40

2,275.94

Income from Deposit in Banks:

New England Trust Company	\$365.35
Old Colony Trust Company	183.42
	<hr/>
	548.77

Miscellaneous Income:

7.16

3,772.71

Total

\$37,025.71

		DEBIT	
<i>General Expenses:</i>			
President's Expense		\$249.12	
Secretary's Expense		768.65	
Treasurer's Expense		433.80	
District Treasurers' Expenses		1,708.13	
Censors' Expenses		690.50	
Delegates' Expenses		1,181.70	
<i>Committee Room Expenses:</i>			
Equipment	\$ 73.75		
Telephone	114.52		
Rent	475.14		
Janitor	59.00		
Salaries	500.00		
Miscellaneous Items	196.51		
		*1,418.92	
Salaries		3,400.00	
Rent		1,200.00	
Miscellaneous Expenses		7.74	
			\$11,058.56
Boston Medical and Surgical Journal			14,000.00
Shattuck Lecture			200.00
<i>Committee Expenses:</i>			
Arrangements	\$2,536.03		
Membership and Finance	10.47		
Education	175.00		
Ethics and Discipline	6.00		
Public Health	39.28		
Publications	200.00		
State and National Legislation	1,043.23		
			4,010.01
Annual Dividends to District Societies			4,000.00
Defense of Mal-Practice Suits			3,073.37
Cotting Lunches			228.50
Total Expenses			\$36,570.44
Balance Transferred to General Fund Account			\$455.27

* Detailed explanation of this item on file for inspection at Committee Room.

NO. 2

THE MASSACHUSETTS MEDICAL SOCIETY
RECONCILIATION BETWEEN THE PROFIT AND LOSS AND BUDGET
FOR THE YEAR ENDED DECEMBER 31, 1926

	Profit and Loss Account	Budget Estimate	Difference Under- Estimated	Over- Estimated
REVENUE:				
Assessments	\$33,253.00			
Interest from Investments	3,216.78			
Interest on Bank Deposits and Miscellaneous Income	555.93			
Total Society Revenue	\$37,025.71	\$36,000.00	\$1,025.71	
Increase in Revenue over Budget		1,025.71		
Total as per Auditors' Report	\$37,025.71	\$37,025.71		
EXPENSES:				
<i>Salaries of Officers:</i>				
Secretary	\$2,500.00	\$2,500.00		
Treasurer	500.00	500.00		
Librarian (Emeritus)	400.00	400.00		
<i>Officers' Expenses:</i>				
President	249.12	250.00		\$.88
Secretary	768.65	750.00	18.65	
Treasurer	433.80	600.00		166.20
District Treasurers	1,708.13	1,500.00	208.13	
Censors	690.50	500.00	190.50	
Delegates	1,181.70	1,000.00	181.70	

Rent	1,200.00	1,200.00		
Journal	14,000.00	15,000.00		1,000.00
Defense of Malpractice Suits	3,073.37	2,000.00	1,073.37	
Shattuck Lecture	200.00	200.00		
Cotting Lunches	228.50	500.00		271.50
Committee Room Expenses	1,418.92	1,500.00		81.08
Standing Committees:				
Arrangements	2,536.03	2,500.00	36.03	
Ethics and Discipline	8.00	25.00		19.00
Membership and Finance	10.47	25.00		14.53
Medical Education	175.00	200.00		25.00
Public Health	39.23	600.00		560.72
Publications	200.00	200.00		
State and National Legislation and Public Instruction	1,043.23	500.00 } 300.00 }	243.23	
Dividends to District Societies	4,000.00	4,000.00		
Miscellaneous Expense	7.74		7.74	
Total Expenses as per Auditors' Report	\$36,570.44		\$1,959.35	\$2,138.91
Total Budget		\$36,750.00		
Expenses Over-Estimated	179.56		179.56	
	\$36,750.00	\$36,750.00	\$2,138.91	\$2,138.91
Revenue Under-Estimated	\$1,025.71			
Expenses Over-Estimated	179.56			
Excess of Net Income over Budget Estimate	\$1,205.27			
Deduct, — *Budget Charge to General Fund Account	750.00			
Balance Transferred to General Fund Account	\$455.27			

*Amount by which Budget Estimated Expenses exceeded Budget Estimated Income.

NO. 3

REPORT OF COMMITTEE ON STATE AND NATIONAL LEGISLATION

The Massachusetts Legislature of 1927 will be asked to consider some very important bills, and the future of scientific medicine in this Commonwealth will be greatly influenced by the reports of their various Committees, and the action taken by the Senate and House. The efforts of your Committee will not suffice to properly instruct the members of the General Court on the merits of the various bills and we appeal to the individual members of the Society for assistance. The President of each of the eighteen District Societies has received a type-written copy of the names and addresses of the Senators and Representatives of his district. This list has been read at a meeting, that each member may know his local Representatives. A letter to your Representative, or a personal interview, will help to solve our problems, and render a real service to our profession and to our fellow citizens. We feel justified in requesting each member to do this work, as so much depends upon it. We have tried to centralize our efforts upon a few important issues, that the members of the Society may be familiar with the principles involved, and the Committees before which the bills will be heard. Governor Fuller, in his Inaugural Address, called the attention of our citizens to certain recommendations concerning the public health, and your Committee advises active support at the hearings, that these bills may be passed. We refer particularly to a bill asking that the Board of Registration in Medicine be given discretionary powers to pass upon qualification of medical schools chartered in this State, and to a bill asking for an increase in the penalty for illegal practice of medicine. We regret that these bills have not been printed as yet, and that it is impossible to procure a copy of the bill as worded, but the hearing has been assigned to the Committee on Public Health, for February 23.

An act relative to the control of "Typhoid Carriers," House Bill 321, will be heard on February 14, before the Committee on Public Health. House Bill 412, asking for the establishment of a division of preventive medicine, and a State health fund, was heard on January 26, and granted leave to withdraw. The report of the special commission appointed to investigate the effect of the present law relating to workmen's compensation in order to ascertain what changes appear to be necessary to cure any defects in said law which have arisen since its adoption. A hearing will be held before the Joint Judiciary Committee, February 10.

House Bill 803 is a petition of William Endicott Greer for legislation to provide for the registration of persons engaged in the practice of Chiropractic. The hearing is assigned for February 16 before the Committee on State Administration.

House Bill 646 asks for the appointment by the Governor of a board of examination and registration to regulate the practice of Chiropractic. This hearing will be held on March 2 before the Committee on State Administration.

House Bill 204 favors vaccination in private schools and the hearing will be before the Committee on Public Health, on February 28. This is the bill of Dr. Samuel B. Woodward and should be actively supported by the members of the Society.

There are many bills concerning cancer, varying from making it a reportable disease to purchasing radium in order to lessen the suffering and distress caused by the neoplasm. There are also various recommendations from the Commissioner of Public Health concerning milk, food, cosmetics, etc., and your Committee has conferred with Dr. Bigelow concerning them.

House Bill 11 asks that physicians report to local police the names and addresses of patients treated by them for wounds caused by firearms. The hearing was held on January 24 and your Committee did not oppose the bill.

House Bill 58 asked for the appointment of an in-

investigator by the Board of Registration in Medicine, and the hearing was held on January 19 before the Committee on State Administration. The Committee reported no legislation necessary.

Your Committee has been greatly aided by local legislative committees, and by certain individuals who have done much valuable work in conferring with various Representatives and reporting their opinions to us. We take advantage of this opportunity to express our appreciation. Without such aid our work would be futile.

A systematic effort on every one's part at this time would pass the vaccination bill: would compel standardization of our medical schools: and would require everyone practicing medicine in this Commonwealth to be approved by the Board of Registration in Medicine.

We owe this obligation to our fellow-man, and to one another. Let us not be found wanting in civic nor in professional interest.

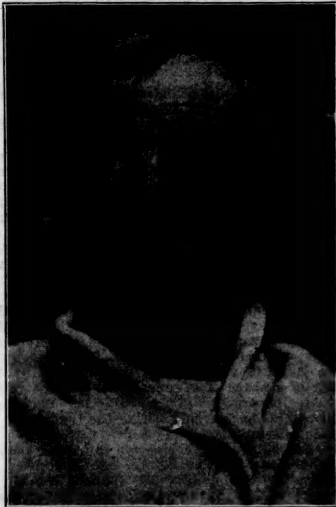
Respectfully submitted,
THOMAS J. O'BRIEN, *Secretary.*

ORIGINAL ARTICLES

THE RESULTS OF SURGICAL TREATMENT OF EPITHELIOMA OF THE LIP FROM THE MASSACHUSETTS GENERAL HOSPITAL AND THE CANCER COMMISSION OF HARVARD UNIVERSITY

BY WILLIAM M. SHEDDEN, M.D.

IN 1922 Simmons and Daland¹ reported 187 cases of cancer of the lip based on those admitted during the ten year period from January 1, 1909, to January, 1919, 172 of these being primary and 15 recurrent.



Tumor at angle (occurs in 3 per cent of cases).

The following paper includes a second series of 107 cases occurring through the four year period from January 1, 1919, to January 1, 1923, that is from three to seven years ago. Of these cases 94 were primary and 13 recurrent. It is of interest to be able to compare two such series and advantageous to be able now to tabulate results on a basis of 14 years of admissions.

Note should be made of the increase in the

number of primary cases admitted per year in our 4-year period relative to the number of cases per year admitted during the 10-year period of Simmons and Daland; an average of 23 against 17, a gain of 6 cases a year.

The writer wishes to thank Dr. H. F. Hartwell and Dr. Channing C. Simmons for their work in reviewing the pathological specimens. This grading was done without clinical knowledge of the cases.

As in the previous series, all cases have been included in which an attempt was made at a surgical cure, and no case was accepted as a cure unless a pathological examination of the tissues removed at operation was made.

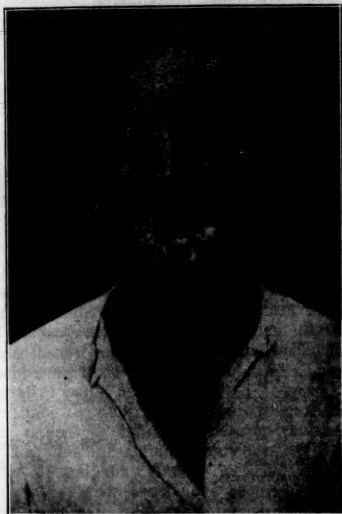
In describing the operative procedure the terms *radical* and *incomplete* will be used. By the former we mean a technic employed approximately as follows:

An incision is made parallel to the mandible starting midway between the upper border of the thyroid cartilage and the mandibular symphysis and extending to the anterior border of the sterno-mastoid and about 2 centimeters below the angle on one or both sides. The skin and platysma are incised and the flaps reflected.

The glands, fascia and fat are then removed from the submental and submaxillary triangles *en bloc* down to the bifurcation of the carotid. The facial arteries and veins are cut off at their entrance into the submaxillary gland. Injury to the lingual branch of the fifth nerve and to the hypoglossal nerve is avoided. The infra-mandibular branch of the facial nerve, if divided, will give a drooping at the corner of the mouth. The latter nerve crosses the facial vessels about 1.5 centimeters below the mandible. This drooping however will disappear. Of the 38 per cent of primary cases which returned to the hospital for examination one only showed this paralysis due to cutting the cervical branch of the facial nerve, and that to a very slight degree.

The above primary incision can be extended to the posterior border of the sternomastoid muscle and joined with another running down over the sternomastoid.

Sistrunk² states that if the glands on either side are found to be involved at the time of operation, all the glands draining that side of the neck should be removed. He excises the



Grade III tumor of whole lip.

glands and fascia from all the triangles of the neck up to a point as high as the styloid process, removing also the internal jugular vein, the omohyoid and sternomastoid, and sacrificing the spinal accessory.

Neither in our series or in that of Simmons and Daland was this very radical procedure adopted and the end-results seem to justify this conservative treatment, as can be seen in Table V. We show in this table 42 per cent of three-year cures in the cases which had the more moderate neck dissection and the pathological specimens of which showed cancer in the glands.*

We have termed as *incomplete* an operation the technic of which employs anything short of the radical procedure. In most cases a "V" excision was used. In a few, submental glands were removed also, and in one case there was a removal of a small portion of the anterior floor of the mouth.

Before taking up the primary cases it is of

*Since writing this article the author has received a personal communication from Dr. Sistrunk stating that he has modified his technique and is doing now the less radical neck dissection.

interest to review the *recurrent* cases as a group, as it is felt that if primary and recurrent cases are studied together, the possibilities of the primary operation will be hard to evaluate.

There being only 13 recurrent cases the data concerning them are of course only suggestive.

TABLE I

CASES *Recurrent* AT ENTRANCE TO MASSACHUSETTS
GENERAL HOSPITAL

	WMS
Total cases	13
Previous <i>incomplete</i> operations	62%
Recurrent locally	75%
Recurrent in glands only	12%
Recurrent locally and in glands	12%
Previous <i>radical</i> operations	38%
Recurrent locally	60%
Recurrent in glands only	0
Recurrent locally and in glands	40%

There were thirteen recurrent cases of which two-thirds had had an *incomplete* operation, in practically all a "V" excision. This portion of the recurrent cases showed local recurrences in 75 per cent and glandular recurrence in 25 per cent. 75 per cent of these *incomplete* cases showed no metastatic cancer in the specimens of glands from a subsequent radical operation at this hospital. In other regions of the body, save the scalp and face, where there has been a simple excision for cancer it is unusual to have a local recurrence unaccompanied by glandular metastases in 75 per cent of the cases.

Half of them had a subsequent bilateral neck dissection in this hospital; 1/4 of them had only one side operated. Of the remaining 25 per cent, 12 per cent showed cancer in the specimen from the subsequent neck dissection and died later of cancer. The other 12 per cent showed such advanced clinical signs of cancer in both neck and lip that operation was not advised.

38 per cent of the cases recurrent at entrance had previously had *radical* operations, and of these the recurrence was local in 3/5 and also in the glands in 2/5. 40 per cent of this group had subsequent *radical* operations at this hospital, and all showed cancer in the glands. Of the remaining 60 per cent, 40 per cent had local excision and 20 per cent a local excision and a curettage of the jaw. We have no specimen from the jaw reported.

In the following tables the percentage of three-year cures is figured (a) on the basis of the total number of cases and (b) on the basis of the total number of cases minus those untraced and inconclusive. Thus, in the table below, we subtracted the 3 inconclusive and 1 (the untraced) from 13. The difference, 9, relative to the figure 5 (i. e. the cases alive and well) gives the percentage of cures based on known data (i. e. 56 per cent). This latter method (b)

is probably more nearly the correct one since, as stated by Sistrunk² in 1920, previous studies of histories in a large series of patients operated on years before have proved conclusively that the majority of patients from whom no data can be secured are alive. The longer, he says, that we attempt to obtain information regarding such patients the higher, as a rule, is the percentage of cures obtained. It is usually easy to hear that patients are dead; those who are living a considerable period after operation have often changed addresses several times and letters to them are returned unclaimed.

Therefore while we include both methods of figuring percentages of 3-year cures, we are basing our conclusions on *method (b)* which derives its percentage of cures only from *definitely known data*. We have also considered as cures those which were *dead but free from cancer* after three years or more had elapsed since entering this hospital. At the end of the paper we have included a table giving the figures from which we derived our percentages.

The outcome of the recurrent cases is of interest. (See Table II.)

TABLE II
RESULTS OF OPERATION ON RECURRENT CASES

	WMS
Total cases	13
Untraced	7% (1 case)
Inconclusive	23% (3 cases)
(A) Three-year cures	41%
(Based on total cases)	
Conclusive cases	9
Died of recurrence	44%
Alive and well	56% (5 cases)
(B) Three-year cures	56%
(Based on conclusive cases)	

7 per cent could not be traced and 23 per cent are inconclusive as they died of cause unknown within the three-year period, leaving 9 cases. 44 per cent of these died of recurrence, one half of these having shown cancer in the glands at operation. 56 per cent are alive and well.

A recurrent cancer of the lip is by no means hopeless, since over half of these cases are alive and well three years and more after their operation here. None of these cured cases, however, had recurrent carcinoma in the glands, as shown in their radical operation at this hospital. 80 per cent of them had had only a previous local excision.

The time interval between the previous operation and the operation at this hospital for recurrence averaged three years—the longest interval being eight years.

As regards the cases *now alive and well*, the time interval averaged two years—the longest interval being five years.

Three cases entered the Massachusetts General to be operated for their second recurrence. One is dead, cause unknown, one is dead of cancer and the other is living and well.

The data in all these tables are relative and therefore figured in percentages. Our figures are run in the following tables parallel to those of Simmons and Daland, and in a third column we have shown the totals. We have not included any fractional percentages.

TABLE III

	WMS	S&D	Total
Total available for study	107	187	294
Cases recurrent at entrance	12%	8%	10%
Cases available for study of mortality	94	172	262
Radical operations	84%	70%	77%
*Incomplete operations	14%	21%	18%
Inop. or op. not advised	0	3%	2%
Refused operation	0	3%	2%

*"Palliative operation" of Simmons and Daland.

Of the 94 cases in our series primary at entrance at this hospital, the end-result is known in 85 per cent. In the series of Simmons and Daland the same percentage of cases could be traced. The data on some of the traced cases, however, is inconclusive, as we shall show later.

TABLE IV

	WMS	S&D	Total
Radical operations	79	122	201
Incomplete operations	15	41	56

It is to be noted here (see Table IV) that there were approximately five times as many *radical* operations as *incomplete* operations done in our series, while in that of Simmons and Daland there were about three times as many; a distinct tendency toward the more *radical* operation. 90 per cent of the *radical* operations in our series, however, showed no metastatic cancer. 79 per cent showed no metastases in the series of Simmons and Daland. Yet, as these authors point out, it is impossible to deny that metastatic cancer has not occurred unless serial sections have been made. The outcome of these cases reported "negative" as regards metastases (see Table V) gives us nevertheless the impression that the above figures are probably correct.

It can be seen in Table V B that in 87 per cent of the *3-year cures* (i. e. those alive and well and those who have died without evidence of cancer three years or more after admission to Massachusetts General Hospital) the specimen at hand showed *no cancer* in the glands. This percentage is to be compared with the corresponding figures in Table V A which shows only 42 per cent of cures. This latter figure repre-

sents the cures where the specimens at hand showed cancer in the glands.

TABLE V
RESULTS—METASTATIC GLANDS

	A Cancer in glands			B No cancer in glands		
	WMS	S&D	Total	WMS	S&D	Total
Total cases	8	24	32	71	92	163
Untraced	12%	16%	14%	15%	10%	12%
End-results known	87%	83%	86%	85%	90%	87%
Inconclu- sive	0	0	0	13%	5%	9%
Conclusive cases	7	20	27	52	75	127
Post-operative deaths	0	5%	2%	0	3%	1%
Died of re- currence	43%	70%	56%	10%	11%	10%
Three-year cures (Based on conclusive cases)	57%	28%	42%	88%	87%	87%
Three-year cures (Based on total cases)	50%	21%	35%	65%	68%	66%

Judging from the *end-results* in these cases is it fair to assume that even if serial sections had been made, very few of the sections reported negative would be now reported "cancer"? We will take the question up again when discussing the radical vs. the incomplete operations.

Simmons and Daland point out that the presence of palpable glands does not necessarily mean that metastases have occurred, and that the converse is also true, namely that the absence of enlarged glands does not rule out metastases.

In our series, of the cases in which a pre-operative search for cervical glands was made and which had a pathological report of the glands removed at operation 68 per cent were reported palpable pre-operatively and of these only one fifth showed cancer. In 32 per cent no glands could be felt, but 10 per cent of these showed cancer in the pathological specimen.

We feel, however, that if glands are carefully felt for with one finger against the buccal surface of the floor of the mouth and one finger palpating the outer surface of the neck against this counter pressure, very few malignant glands will be missed if present. We feel also that relative fixation of the gland to surrounding tissues and relative induration of the glands are points which might be noted in looking for malignancy; though even these criteria are sometimes deceptive, as inflammatory reaction in the glands will at times give these sensations to the palpating finger, the inflammation being due in most cases to secondary infection of the lip ulcer or to septic necrotic teeth. Teeth were mentioned as being in poor condition in 89 per cent of our series.

27 per cent of the glands were recorded as being in the left submaxillary region, 21 per cent in the right submaxillary region, 14 per cent in the "left neck," 13 per cent in the "right neck," 11 per cent in the right submental region, 9 per cent in the left submental region, 3 per cent at the left and 2 per cent at the right angle of the mandible.

As above stated, 79 per cent of the radical operations in the series of Simmons and Daland and 90 per cent in our series showed no metastatic cancer. Why this apparent increase in the number of negative reports? We are not getting them to the hospital any earlier. In each series the delay (between onset and admission to the hospital) was the same, i. e. an average of approximately 48 weeks.

There was an average delay in our cases between onset and first consultation of about 36 weeks and about another 3 months between consultation and entrance into the hospital. It is to be noted here that though the patient took a long time to make up his mind to go to a doctor, yet the doctor delayed him another 12 weeks before he received adequate treatment. Any lip, therefore, which shows for more than three weeks a chronic chapping, keratosis, leukoplakia, or lump, should be looked upon as at least a potential cancer.

Are the cases less malignant in our series compared to that of Simmons and Daland? A fairly accurate comparison can be made, as the grouping was done by the same individuals as in the previous series.

The three groups in Table VI (below) were made up as follows:

Group I comprised those cases in which the tumor cells showed a definite tendency to differentiate and in which the mitotic figures were few. In *Group III* were placed those tumors in which there was an infiltration of the tissues and in which there was practically no tendency to differentiate and no mitotic figures. *Group II* comprised the cases between these two extremes. In this group there was only a moderate tendency to differentiate and there were several mitotic figures, and an occasional pearl formation. Broders⁸ suggested this pathological grouping in 1920, but made up four groups.

TABLE VI
PATHOLOGICAL GROUPING

	WMS	S&D
Group I.....	31%	63%
Group II.....	34%	19%
Group III.....	35%	17%
	69% }	36% }

Table VI shows a markedly higher percentage of Group I cases in the series of Simmons and Daland as compared to ours, and when the

two relatively more malignant groups (II and III) are combined, the higher percentage of malignant cases in our series is still more emphasized.

Pathological specimens were available from 72 per cent of the cases which could be traced, including only those cases in which the end-result was definite and conclusive.

An examination of Table VII will show that the prognosis is progressively worse as we advance from the less toward the more malignant group.

TABLE VII PATHOLOGICAL CLASSIFICATION RELATIVE TO PROGNOSIS			
	Dead of any cause		
	WMS	S&D	Total
Group I.....	4%*	37%	20%
Group II.....	29%	19%	24%
Group III.....	67%	44%	55%
*One case.			
Total cases traced	WMS—68		
" " "	S&D—103		

One case in Group I died 17 months after entrance. Autopsy done outside of this hospital showed metastases to brain. This is fairly conclusive.

Table VIII shows this even more graphically.

TABLE VIII DEAD OF CANCER	
	WMS
Group I.....	1% (one case)
Group II.....	23%
Group III.....	69%

In Table VII we showed the relation between those living and those dead of any cause, cancer or otherwise. Table VIII shows arranged in groups of relative malignancy only those who are known to have died of cancer.

If now we examine these pathological groups with reference to metastases (see Table IX) we find a definite relation between the degree of malignancy and the tendency to develop secondary cancer in the glands.

The 64 cases in Table IX (see below) had had both a pathological grouping of the specimen from the lip and a report on the glands.

TABLE IX GROUPING RELATIVE TO METASTATIC CANCER IN CERVICAL GLANDS	
	WMS
Group I.....	Cancer..... 0
Group II.....	Cancer..... 4%
Group III.....	Cancer..... 35%

In Group I, comprising the mildly malignant cases, no cancer was found in the glands.

Group II, on the other hand, showed metastatic cancer in 4 per cent of the cases, while in the highly malignant Group III over one third show cancer.

The conclusion we can draw from this comparison is that we will get a maximum of cures if we always do a radical operation in Group II and III cases, and it does not necessarily mean a bilateral neck dissection of all the triangles of the neck. The position of the tumor, of course, determines whether the operation shall be bilateral or only on one side. If the growth is definitely more than 1 centimeter from the midline of the lip, a unilateral dissection can probably be safely done. A tumor that lies nearer the centre probably requires an operation on both sides. As can be seen from Table X there is apparently a definitely higher percentage of cures in the cases where one side only was dissected, 81 per cent as compared with 69 per cent. If our series alone is considered it will be noted that there is no difference between the percentage of cures, 85 per cent vs. 85 per cent, whether one or both sides are dissected.

TABLE X RADICAL OPERATIONS								
	A Dissection glands one side of neck			B Dissection glands both sides of neck				
	WMS	S&D	Total	WMS	S&D	Total		
Total operations	63	73	136	16	49	65		
End-results known	84%	88%	86%	87%	80%	83%		
Inconclusive	13%	5%	9%	7%	5%	6%		
Conclusive cases	46	61	107	13	37	50		
Post-operative deaths	0	2%	1%	0	5%	2%		
Died of recurrence	13%	20%	16%	14%	36%	25%		
Three-year cures	85%	77%	81%	85%	54%	69%		
(Based on conclusive cases)								
Three-year cures	62%	64%	63%	69%	43%	56%		
(Based on all cases)								

It is not clear why there is the difference in cures (77 per cent vs. 54 per cent) in the series of Simmons and Daland between those having one and those having both sides dissected. Can we assume that in their series there were more cases in Group II and III, (i. e. more malignant) in Table X B than in Table X A? In our series Table X B had 87 per cent of the pathological Group II and III as against 79 per cent in Table X A. We have not the data on individual cases of Simmons and Daland to review so cannot state definitely the relative malignancy. Perhaps those with clinically a better prognosis had only one side dissected.

It can be seen that in our series that the more malignant tumors are fairly evenly divided between the two types of operations.

Table XI is a combination of column A and B in Table V or in Table X.

TABLE XI
RADICAL OPERATIONS

	WMS	S&D	Total
Total cases.....	79	122	201
End-results known.....	85%	84%	84%
Inconclusive.....	12%	6%	8%
Conclusive cases.....	59	98	157
Post-operative deaths.....	0	3%	1%
Died of recurrence.....	13%	26%	19%
Living without disease three years or more.....	67%	66%	66%
Percentage three-year cures (Based on conclusive cases).....	85%	68%	76%
Three-year cures..... (Based on total cases)	63%	56%	59%

If the radical operation cannot be done because of age or feebleness, etc., the patient still has a fair chance of cure; based on our figures he has a 9 out of 10 chance if his tumor is in Group II and 6 out of 10 if it is in Group III.

We believe, however, that the number of radical operations done should be increased in the Group II and III cases. In our series (see Table XII) there are 49 per cent of cures where the radical operation was not done. Compare this (Table XI) with the 76 per cent cures where the radical operation was done.

Table XII (see below) is made up of cases, the majority of which had a simple excision. The specimens in every case that died showed cancer of the highly malignant type (Group III). It is probable that our cures would have been much higher if these cases had all had a radical operation. Of the 38 per cent who were cured 2/5 were in Group III, 2/5 in Group II and 1/5 in Group I; as a whole a distinctly less malignant group of tumors.

TABLE XII
INCOMPLETE OPERATIONS

	WMS	S&D	Total
Total cases.....	15	41	56
End-results known.....	86%	85%	85%
Inconclusive.....	23%	6%	14%
Conclusive cases.....	10	33	43
Post-operative deaths.....	8%	0	4%
Died of recurrence.....	31%	37%	34%
Three-year cures..... (Based on conclusive cases).....	38%	61%	49%
Three-year cures..... (Based on total cases)	33%	49%	41%

We feel, furthermore, that a higher percentage of radical operations could be performed on the old and feeble if local anesthesia were em-

ployed. If the patient is first adequately narcotized, this group can usually be operated on without much difficulty, and they can usually be allowed to get out of bed very early, sometimes after 48 hours.

The question must here again be raised as to whether serial sections would give us a more accurate idea of glandular metastases in cancer of the lip. Why are we getting 76 per cent cures after removal of the glands as against 49 per cent cures when we do not excise them, if such a large number of the glands removed (80-90 per cent) are stated to contain no cancer? Our figures show that the removal of those glands has definitely added to the chance of cure. The end-results seem certainly to suggest that some of the glands reported negative should perhaps have been reported as containing cancer.

If, of course, 85 per cent of our excised cervical glands in these cases actually do not contain cancer, those who advocate radium therapy for cancer of the lip without having a pathological examination of the excised tumor and without doing a gland dissection have a distinct argument in their favor. Of course those who urge this policy can never be certain that they are definitely dealing with cancer, especially in cases which have a lesion on the borderline between keratosis and Group I cancer. Some of those who handle the lip carcinoma in this manner advise neck dissection when palpable glands appear. But we have shown that these glands will not necessarily contain cancer.

As yet no adequate figures are at hand to approve or disapprove this method of therapy on the basis of end-results.

If the operator or the pathologist feels doubtful whether the specimen is a Group I or II, the radical operation of course is always the safer, and it follows, also, that if the operator elects to do only the incomplete operation he is responsible for the patient's future as regards recurrence. The patient must be followed up and, if it seems to the surgeon that this cannot be done he had better choose the neck dissection.

Although in our series no Group I tumor has shown a metastasis, yet one of our cases *recurrent at admission* was of this group, the recurrence being *local*, however. It is possible, though, that this case was not a true recurrence as the first operation was *seven years* previous, at which time a radical operation had been done, and the present growth was not at the scar of the previous excision.

Sistrunk² feels that in treating cancer of the lip it is always necessary to remove the submaxillary lymphatics on each side. He says he has frequently seen involved glands in the side opposite the growth while no glandular involvement could be demonstrated on the side with the growth.

In our series we cannot find a statement that

glands were involved on the opposite side from the growth without glands on the same side being involved, though it is possible that this has occurred without being definitely mentioned. In most of the cases where a bilateral dissection was done the reason was apparently (from the description of the tumor) that the growth was at or near the centre of the lip, or involved most, or all, of the lip.

Table XIII shows the site of recurrence as nearly as we could determine it.

TABLE XIII
RADICAL OPERATIONS
Site of Recurrence

	WMS	S&D	Total
Neck and local	20%*	19%	20%
Local only	20%	15%	17%
Neck only	20%	48%	34%
Brain	20%	0	10%
Undetermined	20%	19%	20%

*Five cases.

We cannot find evidence of recurrence on the side opposite the tumor from information we have gained from the follow-up letters received or from death certificates on file at the State House, but, of course, such data are by no means conclusive. It might be of interest to know how many of the cases mentioned by Sistrunk had tumors at or near the centre of the lip. The fact that we are getting 81 per cent cures in the cases with unilateral dissection, as against 69 per cent with both sides dissected, would suggest that the bilateral operation is not always necessary.

We have seen, however, a case in which a tumor was excised from an area of the lip near the right commissure and a radical operation done on that side. The glands showed cancer. There were no palpable glands on the opposite side of the neck. The patient also showed considerable leukoplakia over the whole lip. A few months later he appeared again, this time with a tumor near the centre. We feel that this was a re-occurrence, or "the formation of a second cancer, after the removal of a primary growth, the second cancer being on a portion of the lip remote from the scar of the operation," as stated by Simmons and Daland. A gland could now be felt on the same side as the new tumor. Again an excision was done, and a radical dissection was now done on the left side. A few weeks later a suspicious nodule appears on the left posterior submaxillary region. This was treated with radium and disappeared. He has shown no evidence of recurrence for six months. It might be argued that, even though we could not feel glands in the left neck at the time he was first seen by us, he nevertheless had metastasis there; or that if we had done both

sides at the first operation he would not have developed metastasis to the left side. We feel, however, that the second lip tumor was enough to account for his metastases on the left. Re-occurrences on the lip are of themselves enough of a rarity to suggest that we do not need to do a bilateral dissection because of this type of case. We would, however, repeat that if the tumor is not more than 1 centimeter from the midline of the lip bilateral dissection had better be done. If there is doubt in the operator's mind as to whether the tumor extends into the central territory, a dissection of both sides of the neck should probably be done.

TABLE XIV
SITUATION OF GROWTH

	WMS	S&D	Total
Right side	41%	29%	35%
Left side	31%	33%	32%
Center	12%	15%	13%
All lip	3%	8%	5%
At angle of lips	4%	3%	3%
Upper lip	5%	2%	3%
One case with 3 lesions, 2 upper and 1 on lower	1%	0	1%
Not stated	2%	9%	5%

There was only one female in the series. She had a growth on the upper lip which was excised but no neck dissection was done. The tumor was Group III, but she is reported as living and well.

There were two other cases of cancer of the upper lip. One was a man of 48. The tumor was on the right side and glands were felt on both sides of neck. An incomplete operation was done. Review of the specimen showed it to be Group III. The patient is dead of cancer. The other case showed three lesions, two on the upper lip and one on the lower. Excision of lip growth and a plastic was done. There was no neck dissection. All three lesions were found to be cancer, and of the most malignant group. The patient is dead of cancer.

TABLE XV
AGE OF PATIENTS

	WMS	S&D	Total
20-35	1%	5%	3%
35-50	20%	25%	23%
50-65	55%	37%	46%
65-80	24%	27%	25%
80-90	0	5%	2%

As can be seen in Table XV, almost twice as many people develop cancer of the lip between the ages of 50 and 65 as in the preceding or subsequent fifteen years.

Youth and extreme old age are spared. Only 2 per cent of the cases were between the ages of 80 and 90, and 3 per cent between 20 and 35. None below 20.

73 per cent of the primary cases used tobacco and of these devotees of nicotine 88 per cent were pipe smokers.

Broders says that a family history of malignancy plays a negligible part. We would agree to that, as only 6 per cent gave a history of parental cancer. Another 2 per cent gave a history of carcinoma in persons closely related to them.

68 per cent of our series had Wassermann examinations. In this group the reaction was positive in 6 per cent (or 4 cases). 3 of the 4 had a definite pathological report of carcinoma of lip. One died of cancer (a Group III), one is living and well (group not determined). The other is untraced (a Group II). Syphilis, therefore, apparently plays a very minor role in lip cancer.

The majority of the cases of lip cancer had their onset as a painless ulcer (see Table XVI).

TABLE XVI
TYPE OF GROWTH

	WMS	S&D	Total
Ulcerating (including fungating)	73%	61%	67%
Warty	6%	8%	7%
Tumor	7%	20%	13%
Miscellaneous	13%	11%	12%

In none of our cases was an enlarged metastatic gland the first symptom, as has been described by other writers.

12 per cent of all the primary cases admitted to the Massachusetts General Hospital had plastic operations. 57 per cent of this group had 3-year cures.

There were at one time in this hospital two cousins with cancer of the lower lip. In the case of each the growth was so extensive that a plastic had to be done on the lip. A radical neck dissection was done in each case. In neither did the glands show cancer and both are alive and well.

These tumors of the lip were variously treated before entrance with scraping, caustics, actual cautery, plasters, ointments, washes, pastes, iodine, soaps, electricity and violet ray.

53 per cent of our primary cases were treated with radium or X-ray in addition to the operative procedures at this hospital. Excluding the untraced and inconclusive cases the 3-year cures in this group are 67 per cent. This may be compared with the percentage of 3-year cures (79 per cent) of those that did not have radiation. Undoubtedly the lower figure can be explained by the fact that often X-ray treatment was given to that group which the surgeon thought had the poorer outlook, though of the X-ray cases available for end-result data only 15 per cent showed cancer in the cervical glands.

43 per cent of the series had post-operative X-ray and 10 per cent had pre-operative X-ray, i. e. before entering this hospital.

Table XVII is a summary of the whole.

TABLE XVII
CANCER OF LIP—RESULTS

	WMS	S&D	Total
Total cases.....	107	187	294
Cases recurrent at entrance.....	12%	8%	10%
Cases available for study of mortality, etc.....	88%	92%	90%
Radical operations.....	84%	70%	77%
Simple excisions.....	14%	21%	18%
("Palliative operations" of Simmons and Daland)			
No oper. (not advised 3%, refused 3%, S&D).....	0	6%	3%
Operative mortality, radical operations.....	0	2%	1%
Operative mortality, simple excisions.....	1%	0	1%
Inconclusive cases			
No pathological report.....	6%	1%	3%
Died without recurrence in less than 3 years.....	5%	3%	4%
Untraced.....	15%	16%	15%
Cases available for end-result data.....	64%	70%	67%
Radical operations.....	86%	75%	80%
Incomplete operations.....	14%	25%	19%
Number 3-year cures, all operations (Based on total cases, exclusive of those recurrent at entrance.....	94	172	262)
A. Results of operation			
Cases alive and well.....	52%	45%	48%
Cases died without recurrence over 3 years.....	6%	6%	6%
B. Radical vs. incomplete			
Number 3-year cures, radical operation.....	63%	56%	59%
Number 3-year cures, incomplete operation.....	33%	49%	41%
C. Metastases			
Cures, radical operations, glands cancerous.....	50%	21%	35%
Cures, radical operations, not cancerous.....	65%	68%	66%
D. Bilateral vs. unilateral			
Cures, one side neck dissected.....	63%	64%	63%
Cures, both sides neck dissected.....	69%	43%	56%
Number 3-year cures, all operations (Based on conclusive cases.....	69	131	200)
A. Results of operation			
Cases alive and well.....	72%	60%	66%
Cases died without recurrence.....	9%	8%	8%
B. Radical vs. incomplete			
Number 3-year cures, radical operation.....	85%	63%	76%
Number 3-year cures, incomplete operation.....	38%	61%	49%
C. Metastases			
Cures, radical operation, glands cancerous.....	57%	28%	42%
Cures, radical operation, glands not cancerous.....	88%	87%	87%
D. Bilateral vs. unilateral dissection			
Cures, radical operation, one side neck dissected.....	85%	78%	81%
Cures, radical operation, both sides neck dissected.....	85%	67%	71%
Cures when plastic closure necessary.....	57%	28%	42%

CONCLUSIONS

1. The "radical" neck dissection as described will give 3-year cures in 76 per cent of the cases.
2. This "radical" dissection will give 42 per cent of cures even when cancer is present in the glands.
3. Metastatic cervical gland cancer can exist in absence of palpable glands. Palpable glands do not necessarily mean cancer.
4. It is most necessary to excise chronic ulcers and tumors of the lip, if there is a possibility of cancer, and to have a microscopic examination of the tissue excised.
5. Separation of the tumors into pathological groups depending on relative malignancy is apparently of distinct value as regards prognosis, and choice of operation.
6. The delay between onset and admission to the hospital, and that between the visit to the doctor and admission to the hospital is too long.
7. The position of the growth on the lip should determine whether the neck dissection is to be bilateral or unilateral.
8. More neck dissections could be done on the otherwise inoperable if sufficient narcosis and local anesthesia were employed.
9. Syphilis not commonly seen with cancer of the lip and its presence should not delay adequate operative procedures.
10. Heredity plays a minor part in this disease.

TABLE XVIII
CANCER OF LIP—RESULTS

	WMS	S&D	Total
Total cases.....	107	187	294
Cases recurrent at entrance.....	13	15	28
Cases available for study of mortality, etc.....	94	172	262
Radical operations.....	79	122	201
Simple excisions.....	15	41	56
("Palliative operations" of Simmons and Daland)			
No operation (not advised 5, refused 4, S&D).....	0	9	9
Operative mortality, radical operations.....	0	3	3
Operative mortality, simple excisions.....	1	0	1
Inconclusive cases			
No pathological report.....	6	1	7
Died without recurrence in less than 3 years.....	5	6	11
Untraced.....	14	27	41
Cases available for end-result data.....	69	131	200
Radical operations.....	59	98	157
Simple excisions.....	10	33	43
Number 3-year cures, all operations.....	55	88	143
Results of operation			
Cases alive and well.....	49	78	127
Cases died without recurrence over 3 years.....	6	10	16
Type of operation			
Number 3-year cures, radical operations.....	50	68	118
Number 3-year cures, simple excision operations.....	5	20	25

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OBSERVATIONS ON MIGRAINE*

BY C. W. MCCLURE, M.D., AND MILDRED E. HUNTSINGER, B.S.

THE present communication reports observations on patients presenting the migrainous type of headache, with associated gastrointestinal symptoms.

Migraine is a term which, as commonly used, is applied to any clinical condition characterized by periodic headaches. These headaches are often accompanied by various ocular phenomena, by nausea, by vomiting, less often by various types of gastrointestinal pains, and occasionally by symptoms of involvement of the central nervous system. The entity frequently begins about the age of adolescence, sometimes earlier, and persists throughout life although its severity tends to decrease during the later decades. The generally accepted view of the etiology is that it results from disturbance in function of some part of the brain¹. However, no anatomical changes have been found in the

nervous system to make the status of this view certain. There are many other more or less plausible theories explaining the etiology. Among these, a prominent one maintains that it is the result of eye strain. More recently, Miller and Raulston² have revived the view that the entity is a manifestation of protein sensitization. For the literature on this subject the reader is referred to the article of the latter authors. The multiplicity of theories concerning the cause of migraine is so confusing that it has led Gould³ to summarize the knowledge of the entity as follows:—"The word migraine (migrim, the megrims, etc.) is a vulgarization of a misnaming and meaningless symptom, which in the majority of cases is not present, of a widely prevalent and ingravescent disease, with indescribable symptoms, which wrecks life and morbidizes the mind, the etiology and pathology of which were unknown, the location or organs affected being also unknown, and of

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which no treatment avails." Thus in spite of the antiquity—Hippocrates mentions it—and the commonness of migraine, it remains a poorly understood clinical entity.

As concerns mere numbers, the theories to explain migraine pale into insignificance when compared to the therapeutic procedures which have been advocated for its relief. It seems unnecessary to discuss these further than to state that the use of practically every remedy or therapeutic measure discovered as possible relief for headache throughout the centuries has been proposed at one time or another. Undoubtedly, individual patients have occasionally received benefit through their use. Perhaps the measures most frequently giving satisfactory results are relief from eyestrain and attention to diet, but even these are so often of no benefit that the number of patients receiving help is trivial. Thus, even today the treatment of migraine is unsatisfactory.

The above discussion indicates the problematic state of information concerning the etiology and treatment of migraine. Therefore, observations which apparently tend to elucidate either of them seem worthy of recording. It is for this reason, and also in the hope of stimulating other investigations, that the present observations are reported. The findings of importance, in relation to the present communication, are outlined in the following protocol.

A prominent feature of the findings outlined in the protocol is the frequency of the evidence of pathological involvement of the gall bladder. Such involvement was demonstrated upon operation in only two patients; while the evidence of it in the remaining patients was obtained from x-ray films. For this purpose the well known modified Graham procedure of Whitaker⁴ was used. It is recognized that apparent abnormalities found in the film, after the use of this procedure, do not furnish unquestionably conclusive proof of the gall bladder disease. But the percentage of abnormal findings occurring in this series of patients is too great to be attributed as due solely to errors inherent in the method. Additional evidence of the existence of gall bladder disease was the complaint of epigastric pain simulating gall stone colic in four of the patients. Another striking feature portrayed by the protocol is that of disturbance in the state of liver function. This was determined by analysis of the duodenal bile, according to methods previously published⁵. By the use of these methods the functional activity of the liver was studied in twenty patients and was demonstrably abnormal in fifteen of these. In addition, study of the intermediary metabolism of fats has yielded results suggestive of disturbed hepatic function in patients whose duodenal bile was not found to

be abnormal. Therefore, the findings show that evidences of functional hepatic disturbance and pathologic gall bladder involvement were so frequent as to suggest that these conditions may be considered as part of the symptomatology of migraine.

Another finding, considered of importance, is that of anaphylactic reactions. Eight of the patients were subjected to cutaneous protein sensitization tests for foods of which they ate commonly. Unmistakably definite reactions to the protein of certain foods were obtained in five of the patients; while no reactions were demonstrated in the other three.

Further study of the patients showed the following additional findings. Nine of the patients considered that dietary factors played a role in the production of headache. These dietary factors comprised either the quantity or quality of foods. Milk, meat and eggs were the three articles of food which patients most often suspected were the cause of trouble. Nausea and vomiting frequently accompanied the attacks of headache. These symptoms usually ended the attack, but were sometimes present throughout. Two patients suffered with occasional attacks of diarrhoea; but whether this is to be ascribed to the migrainous state is uncertain. Three of the patients suffered with incipient type of vertigo, whose persistence was most annoying.

Discussion of the findings may be summarized as showing the occurrence of protein sensitization, of frequent functional and anatomic hepatic disturbances, of headache and of gastrointestinal manifestations.

The treatment of the patients of this series was limited to the three following procedures: (1) withdrawal of foods containing proteins to which the individual patients reacted; (2) treatment of the disturbed state of liver function; and (3) attention to the patient's nutritional condition. Cholecystectomy, suggested by the x-ray findings, was not considered advisable; especially in view of the failure to obtain relief by the two patients who had experienced it. The more commonly advocated therapeutic measures were not used, because their previous trial had produced no benefit. Withdrawal of foods containing proteins causing sensitization reactions was followed by great benefit in four of the five patients who showed anaphylactic reactions. The fifth patient reacted to lactalbumin, but its withdrawal from the diet produced no apparent effect on the symptoms. Treatment of the disturbed liver function was carried out on fourteen patients; of whom thirteen obtained relief or improvement. The treatment consisted of the intraduodenal administration of magnesium sulphate, which is the only procedure so far proved to be able to affect a dis-

Principal findings, exclusive of headache, in a series of patients afflicted with migraine

No. of patient	Age of patient	Age of onset of migraine	State of liver function	Cholecystography	Abdominal pain	Symptoms nausea and vomiting	Protein sensitization reaction	Remarks
1	57	10	abnormal		epigastric	both		Gall stones, cholecystectomy. No relief from migraine.
2	42	15	normal	normal	none	none		Relieved by intra-duodenal therapy
3	48	5	abnormal	abnormal	epigastric	both		Improved by intra-duodenal therapy
4	46	15	abnormal	normal	epigastric	both		No result by intra-duodenal therapy
5	23	14	abnormal	abnormal	epigastric	both	Casein of cow's milk	Relieved by withdrawal cow's milk
6	21	11	abnormal	abnormal	colonic colic	both		Relieved by intra-duodenal therapy and diet
7	60	35	abnormal		none	both		not treated
8	45	10	abnormal		epigastric	both		Relieved by intra-duodenal therapy
9	48	3	normal	normal	none	both		Gall stones, cholecystectomy. No relief from migraine. Relieved by intra-duodenal therapy.
10	60	10	abnormal		none	both		Improved by intra-duodenal therapy
11	45	20	abnormal	abnormal	none	none	lactalbumin of cow's milk	Relieved by intra-duodenal therapy
12	24	5	normal		none	none	fish	Relieved by withdrawal of fish
13	50	10	normal		none	none	fish	Relieved by withdrawal of fish
14	30	10			none	none	cauliflower	Relieved by withdrawal of cauliflower.
15	50	5	normal	abnormal	none	none		Not treated
16	45	3	abnormal	abnormal	none	both		Relieved by intra-duodenal therapy
17	30	5	abnormal	abnormal	none	nausea		Improved by intra-duodenal therapy and diet
18	24	12	abnormal	abnormal	none	both		Improved by intra-duodenal therapy
19	55	35	abnormal	abnormal	none	none		Improved by intra-duodenal therapy
20	30	12	abnormal	abnormal	none	both		Not treated
21	50	15	abnormal	abnormal	none	both		Relieved by intra-duodenal therapy

turbed functional state of the liver. This treatment was administered according to the procedure previously published⁶. During this treatment some of the patients obtained relief within a few weeks while others showed improvement only after many months. Augmentation of the food intake proved helpful to the undernourished patients but this benefit was often preceded by an initial period of aggravation of the migrainous symptoms; which was apparently the immediate effect of ingesting large amounts of food.

The incidence of protein sensitization and the frequency of demonstrable hepatic disturbance in this series of patients are of interest in relation to the possible etiology of migraine. Such relationship is suggested by the fact that sufficiently toxic substances disturb the functional condition of the liver. Furthermore, it is well established that toxic states can produce headache, a variety of gastrointestinal symptoms and other clinical manifestations. Thus intoxication can explain all the symptoms composing the clinical entity, migraine. The only demonstrated toxic substances affecting the patients of this series are represented by the proteins to which certain of them showed sensitization reactions. That these proteins actually produced intoxication is evidenced by the disappearance of symptoms after the withdrawal of the foods containing them. Therefore, the findings in the present investigation lend support to the view that a type of migraine results from an intoxication. This is the essence of the view previously suggested by Leeuwen and Zeyder⁷, and upheld by Miller and Raulston. It should be emphasized, however, that neither the present observations nor those of previous investigators exclude the possibility of the participation of many factors, other than anaphylaxis, which can produce intoxication and can disturb the liver's functional state.

SUMMARY

The principal results of the observations on this series of migrainous patients may be summarized as follows:—

(1) Evidences of intoxication were found which it is suggested participate in the production of migrainous symptoms. These evidences are the frequency of the presence of disturbed liver function and the less often occurring demonstration of protein sensitization.

(2) The results obtained suggest the advisability of considering two additional therapeutic measures in selected cases. One of these is the withdrawal of proteins causing anaphylactic reaction; and the other is the treatment of one of the apparent symptoms of migraine; i. e., that of disturbance in the liver's functional state.

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THE INCORRECT USE OF IODINE IN THE TREATMENT OF GOITRE

Iodine given in very small amounts will prevent the development of the simple colloid goitre of adolescence.

Iodine given in small amounts will cure a certain number of goitres of adolescence. These patients should remain under supervision while the treatment is being given. It is unsafe to give iodine in any form to the patient with colloid goitre after the age of 25, for many of these glands contain small adenomata which may be rendered active by its use.

Iodine should never be given in any form or in any amount to the rounded goitre of long standing. These quiescent adenomatous goitres will become toxic by its use. There is no medical treatment that is safe for such patients.

Iodine should not be given to any adenomatous goitre patient already toxic. These patients are all essentially surgical if their condition will warrant operation.

The iodine treatment for exophthalmic goitre is not a curative one: it is merely a treatment given for the preparation of the exophthalmic goitre patient for operation, and it is given best in a hospital.

The public should be warned of the great danger in the self-administration of iodine for the treatment of goitre, and physicians should have a clear understanding of the types of goitre that are amenable to the iodine treatment and of the danger which attends its incorrect use.—Donald Guthrie, M.D., Sayre, Penn., in *Therapeutic Gazette*.

DR. THOMAS A. STOREY HONORED—A signal honor has been conferred upon Dr. Thomas A. Storey in the presentation of the Luther Halsey Gulick Award for distinguished service in the cause of physical education. The award was made by the Physical Education Society of New York and Vicinity at a dinner meeting November 23 at the Aldine Club.

Dr. Storey has been professor of hygiene at the College of the City of New York since 1906. He was the first executive secretary of the United States Interdepartmental Social Hygiene Board in Washington, serving from 1913 to 1921. This fall he was appointed professor of hygiene and physical education at Stanford University, California, and assumed his duties there January 1.

**Case Records
of the
Massachusetts General Hospital**

ANTE-MORTEM AND POST-MORTEM RECORDS AS USED IN
WEEKLY CLINICO-PATHOLOGICAL EXERCISES

EDITED BY R. C. CABOT, M.D.

F. M. PAINTER, A.B., ASSISTANT EDITOR

CASE 13071

CHRONIC HEADACHE

MEDICAL DEPARTMENT

A Scotch-American stationary fireman thirty-two years old entered December 27 complaining of nosebleeds and weakness of four weeks' duration. He was somnolent, apparently toxic. The history was not considered reliable for details.

As long as he could remember he had had headache once or twice a week related to no factor of his life, occurring at any time of day accompanied by no other symptoms. He had been otherwise perfectly well except for rare sore throats until four weeks before admission. Then he developed sore throat, apparently of acute onset, with dysphagia, a raw feeling inside the throat and some external swelling. At the same time he began to have nosebleeds, recurring every day since the onset and requiring from one to four handkerchiefs. Two weeks before admission the bleeding was continuous for seven hours. He also coughed and vomited blood, but thought that this came originally from his nose. At the onset purple spots the size of five cent pieces appeared on his legs and lasted a week. For four weeks he had had increasing drowsiness and blurring of vision and had lost strength. He had vomited almost every day, always food eaten except on the one occasion when he thought he swallowed the blood. He had no nausea. The day of admission for the first time he had dull "stiff" pain in the lower legs.

His father died of heart trouble, one brother of consumption. The patient was exposed.

He gave a past history of infantile paralysis at six years leaving his feet out of shape. He had rare sore throats, one attack six months before admission lasting three days. He was troubled occasionally by hemorrhoids. His bowels were regular with cathartics every two or three days. He used a package of chewing tobacco every two days.

Clinical examination showed a fairly well nourished, drowsy man with foul breath and moderate swelling of the face. The skin and mucous membranes were pale. The legs showed several purpuric spots. There was bluish pigmentation over the left temple. Left internal strabismus and mild left seropurulent conjunc-

tivitis. The nose was obstructed with crusts. There was moderate pyorrhea. The tongue was dry and coated. The throat was reddened. On each tonsil was a dirty white sunken patch of ulceration. The left cervical glands were the size of beans. One right tonsillar gland was the size of a hickory nut. The apex impulse of the heart was heaving. The left border of dullness was 9.5 centimeters from midsternum, half a centimeter outside the midclavicular line. There was no other enlargement to percussion. The action was regular. The sounds were of poor quality, not well heard at the apex. The aortic second sound was accentuated. There was a systolic murmur at the apex. Blood pressure 160/90. The abdomen, lungs and genitals were negative. Rectal examination showed a perianal fissured rosette and a very soft prostate. The hands showed coarse tremor. There was bilateral *pes cavus*. Both ankles were tender but apparently normal. Fundi: discs pale. Pupils and reflexes normal.

The amount of urine was normal when recorded. Urine red and smoky, specific gravity 1.013, a large trace of albumin at the single examination, sediment loaded with red cells. December 27 non-protein nitrogen 325 milligrams, uric acid 13.2 milligrams, December 29 non-protein nitrogen 470, uric acid 12.1. Blood: leucocytes 6,600, polynuclears 95 per cent., hemoglobin 40 to 45 per cent., reds 1,310,000 to 2,160,000, fairly marked anisocytosis and poikilocytosis, no achromia; a few of the polynuclears were young; platelets increased in number, some large. Wassermann negative. Icterus index two. Dark field examination of a smear from the throat was negative for spirochetes. An attempt at a throat culture was unsuccessful.

Temperature 97.3° to 99.3° by rectum, pulse 110 to 75, respirations 28 to 17.

Orders. December 27. Liquids with milk. Fluids to 1500 cubic centimeters. Individual precautions. Dobell's gargle every four hours. Swab throat with Fowler's solution t.i.d. For restlessness, codeia by mouth, half a grain every three hours. At night luminal by mouth, three grains, may be given in place of codeia. Digitalis four and a half grains daily by mouth. Avoid even slight trauma to rectum in taking temperature or giving enemata. Aspirin ten grains t.i.d. Boric acid eye wash to left eye t.i.d. For marked pain or restlessness at night substitute for codeia morphine sulphate one-sixth grain s.c. every three hours p.r.n. December 28. Force fluids. Codeia half a grain by mouth. Rectal tap water, eight ounces 5 per cent. glucose every four hours. December 29. Morphia one-sixth grain s.c.

December 28 the patient was given 750 cubic centimeters of saline intravenously and 600 cubic centimeters of blood by transfusion. He was in moderate coma from which he could be roused. The breathing was stertorous. Two

days later he was more comatose. The respirations were very deep. The breath had a strong ammoniacal odor. Catheterization yielded sixteen ounces. He was taking nothing by mouth. Two intravenous treatments were given daily, about 1,000 cubic centimeters. December 31 he died.

DISCUSSION

BY RICHARD C. CABOT, M.D.

NOTES ON THE HISTORY

If this were in an older man we should say it probably is nephritis. He is having nosebleeds, he is having headaches, he is getting weak, he is having eye trouble, and it perfectly well may be that at his age. But at thirty-two it is a good deal less likely. The presence of these purpuric spots on his legs is not so characteristic as the nosebleeds. We begin to wonder whether there is not some blood trouble or something other than his kidney to cause all this.

NOTES ON THE PHYSICAL EXAMINATION

The enlarged tonsillar gland was presumably from the bad tonsils.

This non-protein nitrogen pretty nearly settles the case, as I see it, in favor of the thing I thought of first, nephritis. I do not personally remember a non-protein nitrogen as high as 470.

The icteric index is subnormal,—no evidence of any blood destruction.

The treatment is symptomatic, but it is obvious, I think, that they have made the same diagnosis that we have: chronic nephritis.

DIFFERENTIAL DIAGNOSIS

I do not see what we can say except chronic nephritis with secondary anemia. It is not common to see as much anemia as this, but he has had a lot of nosebleed and this is very likely the post-hemorrhagic as well as the toxic anemia that we expect with nephritis.

We know very little about his urine. He was here a very short time, and we had only a single examination. But that single specimen is perfectly consistent with a chronic nephritis. It is rather surprising that his heart is not larger, but perhaps it is larger than we have found out. It is said to be a heaving impulse, which usually means a large heart.

My guess is also that his blood pressure has been higher and has fallen, as is so apt to be the case near death.

Ordinarily I suppose one would say this patient died of uremia. We know a good deal less what we mean by that state than we used. But we know that in nephritis as well as in diabetes toxic states are brought about by infection. He has an acute infection, and that I imagine is what occasioned this particular outbreak.

It is rather remarkable that there is no more in his fundi. It is possible that the examination was not so expert as it might be.

MISS PAINTER: It was made by the house officer.

A PHYSICIAN: What did the Wassermann show?

MISS PAINTER: No Wassermann was done.

A PHYSICIAN: Why was there no achromia?

DR. CABOT: I do not believe that was so. I think if we had been there we should have found some achromia. It has no right to be absent. However, that statement agrees with the hemoglobin percentage, which is given as a rather high percentage for that number of red cells. I am glad that point has been brought out, because it is against my diagnosis. But still I do not see how to make any other.

It is always dangerous to stop with one diagnosis. What else ought we to consider as a possibility? I really cannot make any other reasonable supposition. It is not like a primary anemia in any essential respect. There is really nothing except the high color index that suggests it. And I have never seen so high a non-protein nitrogen except in a destructive renal lesion. We could consider whether it might be from some so-called "surgical" condition of the kidney, but we have nothing to suggest it.

So that I shall say the diagnosis will be of chronic nephritis. I have almost given up trying to say what kind of nephritis, but in general at this age it is more apt to be glomerular than vascular. The other conditions should be of a hypertrophied and dilated heart, of anemia, and of a terminal infection which very likely involved the blood, starting perhaps from his tonsils. This is the sort of case where we should not be surprised at all to find a streptococcus septicemia.

A PHYSICIAN: Why were they taking such precautions about injuring his rectum?

DR. CABOT: I suppose they were afraid he would bleed. He bled for seven hours at one time, and I suppose they thought he might repeat it, his reds being low.

DR. YOUNG: What about the purpuric spots?

DR. CABOT: We have to say cachectic purpura, that is, purpura which we do get now and then, usually in exhausting diseases, tuberculosis or cancer.

A PHYSICIAN: Do you think that his sore throat and sore eyes had anything to do with it?

DR. CABOT: I think it is a terminal infection, the kind that chronic nephritides are very liable to, and which precipitated the uremia from which he died.

I ought to speak about the strabismus. We do not know whether it has come on recently; probably it has always been there and has nothing to do with this case. If it had just come on we should have to think of meningitis. Is there

anything else to suggest meningitis? He had headaches and coma. They did not do a lumbar puncture, so there is no evidence on that side. There is nothing said about any abnormal reflexes in his legs. But there is an element of doubt here on account of our not knowing the duration of the squint.

MISS PAINTER: There is nothing in the history about it. It is on the same side as the discoloration of the temple and the conjunctivitis.

DR. PORTER: He has no fever.

DR. CABOT: I think I will stand on the diagnosis given.

CLINICAL DIAGNOSIS

Chronic nephritis.

Uremia.

Tonsillitis.

DR. RICHARD C. CABOT'S DIAGNOSIS

Chronic glomerulonephritis.

Hypertrophy and dilatation of the heart.

Secondary anemia.

Terminal infection (streptococcus septicemia?)

ANATOMICAL DIAGNOSIS

1. Primary fatal lesions

Chronic glomerulonephritis.

2. Secondary or terminal lesions

Hypertrophy and dilatation of the heart.

Diphtheritic colitis.

Intussusception (ileum into cecum).

Septicemia, streptococcus hemolyticus.

DR. TRACY B. MALLORY: The case was primarily one of chronic nephritis, and as Dr. Cabot predicted, the heart was very much enlarged. It weighed 475 grams, which is a very considerable hypertrophy in a man in the early thirties.

The kidneys' combined weight was 140 grams, approximately half of normal. The capsules stripped with a great deal of difficulty, leaving a very granular surface. There were several small cysts in each kidney, not of significance, but the cortex was uniformly thin, the average two to three millimeters above the bases of the pyramids. Microscopical examination showed that the great majority of the glomeruli were sclerosed. There were a few normal ones and also a few in which progressive changes were still taking place in the form of hyalinization of the capillary walls. The vessels of the kidneys showed very little sclerosis. So that there is no question of chronic glomerulonephritis dating back to some infection in earlier years.

One point about the case was a complete surprise to everyone. The extremely high non-protein nitrogen has been commented upon. I

think we found the explanation for that. This is a specimen of the terminal portion of the cecum. There is an intense diphtheritic colitis ten centimeters from the ileocecal valve, and the last thirty centimeters, approximately, of the ileum had passed through the ileocecal valve and formed an intussusception in the cecum. The diphtheritic inflammation was present in the Peyer's patches of this intussuscepted portion of the ileum also, which was swollen out to such an extent that even post-mortem it was impossible to reduce the intussusception.

As intestinal obstruction is one of the factors which is known to push the nitrogen retention quite high on some occasions, that added to his chronic nephritis undoubtedly caused the extreme retention in this case.

As to the cause of this colitis, a moderate degree of colitis is a recognized and common complication of severe nephritis. It is one of the things that post-mortem we always look for in a uremic death. But I have never seen anything equal to this in extent.

The man also had a septicemia as Dr. Cabot suspected, streptococcus hemolyticus, and I imagine that the same organism was at work in his colon to account for this intense colitis.

DR. CABOT: Was there any passive congestion of the lungs?

DR. MALLORY: There was very little. There was hypostatic congestion of the dependent portions, but no general congestion.

A PHYSICIAN: Was that heart dullness wider than nine centimeters?

DR. MALLORY: I think it must have been. 475 grams is an extremely large heart.

DR. CABOT: I do not think many of us take percussion very seriously now. I teach students not to percuss the heart. I think it is a waste of time.

CASE 13072

TWO DIAGNOSES ARE BETTER THAN ONE

UROLOGICAL DEPARTMENT

An Irish-American shoe factory operative forty-three years old entered the hospital December 10 complaining of pain in the right side. Twenty-four years before admission fifteen days after an appendectomy he took a drive in an automobile. After it he stayed in bed thirteen weeks. Upon getting up he had colicky cramp-like pain in the right side. Then for years he had no pain. For the past ten years he had had the pain "come on for about a week." Since June it had been present from a few days to a week at a time with remissions for a week or two, the attacks becoming much more severe, so that recently he had been unable to sleep. Sometimes

it went to his back. Occasionally the pain was associated with nausea and vomiting. For two months he had urinated two or three times at night. For a week he had had blurring of vision and had noticed some specks before his eyes. Examination in the Out-Patient Department just before his admission to the ward showed the blood pressure 190/130. The urine showed a trace of albumin; the sediment showed an occasional red blood corpuscle.

Except for the present illness he had always been well and strong. He had had only occasional sore throat and head colds. He admitted Neisser infection several times. He developed a stricture which was treated ten years before admission and had given no trouble since that time. Since June his weight had fallen from one hundred and sixty-five pounds to one hundred and forty. His bowels were constipated. He used much tobacco.

His family history is not significant except that his mother died of heart disease.

Clinical examination showed a well-nourished man lying flat in bed, apparently in considerable discomfort. There was moderate pyorrhea. The apex impulse of the heart was felt in the fifth space. The left border of dullness was 11 centimeters from midsternum, 3 centimeters outside the midclavicular line. There was no other enlargement to percussion. The aortic second sound was very loud and snapping. There was slight protodiastolic gallop near the apex. A slight systolic murmur was heard at the apex, of no significance. The radials were thickened and markedly tortuous. The blood pressure was 225/130 to 118/95. The lungs were clear. A large tender cystic mass occupied most of the right upper quadrant and extended almost to the umbilicus. It was connected with a solid mass which could be felt in the flank also. There was a sulcus between the two. The whole mass apparently was right kidney. It moved with respiration and was separated from the liver by an area of tympany. Genitalia: it was impossible to pass a number 12 soft rubber catheter. The prostate was symmetrical, not enlarged. The pupils and reflexes were normal. Fundus examination showed marked compression of veins by arteries which were tortuous and showed a broad white line. The left eye ground showed considerable vascular retinitis with scarring, and a few small hemorrhages. The optic discs in both eye grounds showed blurring of the edges but no edema. The scarring was not so marked in the right eye ground.

Before operation the amount of urine was 28.64 ounces, specific gravity 1.005, a large trace of albumin, sediment loaded with red blood cells. Renal function five per cent. Blood not recorded. Non-protein nitrogen 85-115. Blood CO₂ 36.6 volumes per cent.

X-ray. The outline of the left kidney was

fairly well shown. The right was not visible. There was dullness throughout the right flank. In the angle between the twelfth rib and the spine on the left side there was a dense shadow present on both plates, perhaps an artefact or a stone in the left kidney pelvis.

A medical consultant advised keeping the patient warm in bed, giving fluids in any way possible, by mouth and subpectorally, as nearly as possible 1000 cubic centimeters every eight hours, colonic irrigations, and luminal a grain and a half for restlessness.

The patient remained in much the same condition. The pain persisted but was not so marked. The mass in the right side became if anything larger and more tense.

About noon December 14 he began to complain of very severe colicky pain. Pantopon gave only temporary relief. He vomited once, and was unable to take any food. By night the mass in the flank was considerably larger and more tense. Pressure on it caused intense pain. The patient seemed paler, and his breath had an ammoniacal odor, more marked than upon admission. About quarter past nine he had a severe chill lasting fifteen minutes, with a temperature of 101.6°. After this he was irrational for an hour. There was no change in the eye grounds. He had voided only sixteen ounces during the whole day. His blood pressure remained about 200/130. He broke out into a profuse perspiration.

At two o'clock in the morning December 15 operation was done. After it the patient went into a little deeper coma. The blood pressure fell to about 110/95. A subpectoral of 2½ per cent. glucose was given. One ampule of cardiazol was given every two hours to try to raise the blood pressure. By noon he was in marked stupor and very difficult to arouse. His breath had a very marked odor. At one o'clock he was given a subpectoral, two ampules of pituitrin. At one o'clock in the morning December 16 he was given 500 cubic centimeters of five per cent. glucose intravenously. This raised the blood pressure from 110/95 to about 130/80. There was considerable hyperpnea. That afternoon digifolin was started, another subpectoral of five per cent. glucose was given and 100 cubic centimeters of 25 per cent. glucose and 200 cubic centimeters of five per cent. sodium bicarbonate was given intravenously. After this the respiration was a little easier, but he was still extremely drowsy and did not speak. The blood pressure was about 180/120. The bladder was catheterized in the morning and six ounces obtained. At six o'clock one ounce was obtained, practically complete anuria. There was almost no drainage at all from the operation wound. The abdominal tumor had entirely disappeared. The coma gradually deepened. The evening of December 17 the patient died.

DISCUSSION

BY EDWARD L. YOUNG, JR., M.D.

There is no explanation why he stayed in bed for thirteen weeks. Was it pain that kept him in?

MISS PAINTER: The record does not mention pain until the end of the thirteen weeks in bed. When he got up from that the pain began.

DR. YOUNG: It is sometimes very much easier to take out an appendix than to make a correct diagnosis of whether or not an appendix should come out. And always when pain in the right side persists after appendectomy the suspicion is that the original condition was not corrected. Of course that is not always so, but it is suggestive. And knowing what we know about the high percentage of cases in which the actual condition is a kidney lesion, such a story as this always brings up the possibility of renal damage and demands a complete study there. We know, for instance, that almost a third of a series of cases studied at this hospital who did have stones in the urinary tract had had a previous abdominal operation done, generally appendectomy.

The urine analysis again attracts our attention to the urinary tract as the cause of all his pain. There is evidence enough of severe renal damage. If this process is one-sided he ought not to have a damage as great as this. We have to assume that both kidneys are damaged, or else that this is one of the not too uncommon cases where one kidney is damaged and the other is a congenitally small kidney doing very little work.

The mass which is felt here is a large mass, but we do see a hydronephrosis occasionally grow to that size; it is however unusual. A kidney tumor, the commonest kidney tumor of course being hypernephroma, I think rarely grows to this size without the patient's showing something more in the line of general damage. That again is not always true. I have recently seen a case where the tumor was as large as this, and after an operation which did nothing but prove it the patient went back to work for a short time.

Of course we want to fit these symptoms on to those of twenty-four years before. If so that automatically rules out a hypernephroma.

A congenital cystic kidney, so-called, is a condition which would fill all of the points mentioned here in that it does affect both sides, and one side is invariably the side on which symptoms present. The mass can be as large as this. The three cardinal symptoms, so-called, are pain, tumor, and the signs of chronic nephritis. All of those things are present here.

I wonder if Dr. Holmes would find anything of interest to speak of here.

DR. GEORGE W. HOLMES: I do not see anything I could call a stone in the first plate. I

cannot add much to what is in the note. The general dullness on that side in a good plate, as this second plate is, is suggestive of course of a tumor or something filling that flank. Ordinarily we should be able to see the outline of a normal kidney. There is a very faint shadow in the middle of this mass which might represent an area of localized calcification in the tumor, or a faint stone. On the opposite side, though, we can see what looks like the outline of a normal kidney, of normal size and shape. That is against cystic kidney.

DR. YOUNG: It is also against congenital defect, isn't it, because that is normal size?

DR. HOLMES: Yes; but in such an observation as this there is always a possibility of error, because that might not be the kidney. Above that is a shadow which is hard to explain. I do not believe it is a stone in the kidney because it is rather high. It runs up beneath the shadow of the rib and looks more like an artefact than anything else. But if it is it is hard to explain its presence in two plates. I do not know what that is.

DR. YOUNG: The one thing we have got then is evidence of extreme kidney damage and a tumor which is in the right kidney. As to diagnosis: It seems to me that we have to say this thing is a kidney tumor, with the evidence we have of kidney damage, and the mass that comes through to the flank. That seems to me to be the best diagnosis. It seems to me that if it were hydronephrosis on one side and a normal kidney on the other side he ought not to have as complete a kidney damage as he has. And if it is a congenital cystic kidney, so-called, it might be possible for the other side to be so very little changed in size that it would show normally in the X-ray and still be very much damaged. There is no stone that we could be sure of. He has no temperature. It does not suggest a very large pyonephrosis. Hypernephroma again, in the first place, we could not hitch to the trouble twenty-four years before, and the other kidney ought not to be so badly damaged that he is dying of uremia.

I am going to say congenital cystic kidney as the first diagnosis. There is no operation that will cure that, of course, but Rovsing has had some success in multiple punctures of the worse kidney, opening on to it and emptying all of the contents of the cysts; and of course in certain cases it is permissible and helpful in stopping pain to take out the worse of the two kidneys where the other can be proved to be in very decent shape. That is not the case here. In this condition I think all that can be done is local and the puncturing of that cyst, whatever it is.

DR. YOUNG'S PRE-OPERATIVE DIAGNOSIS

Congenital cystic kidney.

PRE-OPERATIVE DIAGNOSIS

Hydronephrosis.

OPERATION

Under novocain a short right lumbar incision was made through the abdominal wall and a large cystic mass palpated in the region of the kidney. This mass was incised and a pint and a half of dark brown bloody fluid escaped under pressure. A rubber tube drain was sutured into the incision in the mass.

FURTHER DISCUSSION

Of course that is the only thing that could be done, and we really know very little more than we did before.

CLINICAL DIAGNOSIS (FROM HOSPITAL RECORD)

Hydronephrosis, right.
Chronic nephritis.
Hypertension.
Acute uremia.
Anemia.
Right nephrotomy.

DR. EDWARD L. YOUNG'S DIAGNOSIS

Congenital cystic kidney.

ANATOMICAL DIAGNOSIS

1. *Primary fatal lesions*

Congenital anomaly—valve formation in right ureter.
Hydronephrosis, right.
Chronic glomerulonephritis.

2. *Secondary or terminal lesions*

Arteriosclerosis.
Cardiac hypertrophy and dilation.

DR. TRACY B. MALLORY: The case was one of hydronephrosis, and it seemed a rather unusual one to us. It was on the right, and with the old appendectomy scar and in the absence of the appendix we naturally thought of adhesions having formed at the time of the original operation twenty years ago, which would narrow the lumen of the ureter to the point of causing obstruction. We were unable to find any adhesions about the ureter at all. However, it was very much dilated, down to a point about six centimeters from its entrance to the bladder. A probe passed up from the bladder, but attempting to pass the probe from above down it would not go, and when we opened up the ureter we found at this point at which the dilatation ceased a very small valve, a thickening of the mucosa, looking almost exactly like the valves we get normally in veins. This was just big enough almost completely to obstruct the ureter.

I have looked up the literature a little on that,

and find that valves in the ureter are fairly common at the junction of the pelvis of the kidney with the ureter, and also atresia at the entrance of the ureter into the bladder. I can find vague references to valves occurring elsewhere, but I have been unable to get hold of any specific report of such a case.

The bladder itself was essentially normal. All the pathology was above that.

The right kidney was a huge cystic mass. It was just a shell of fibrous tissue. The left kidney showed a chronic nephritis with the ordinary features, the capsules stripping with difficulty, granular surface, narrow cortex. It was undoubtedly the insufficiency of the other kidney which led to his uremia and death.

DR. CABOT: How was his heart?

DR. MALLORY: It was much hypertrophied.

CASE 13073

A CASE OF LUNG INFECTION TREATED BY BRONCHOSCOPY AND ARTIFICIAL PNEUMOTHORAX

MEDICAL DEPARTMENT

A married Polish Jewess twenty-two years old entered November 24 complaining of cough of nine days' duration with large amounts of foul sputum for six days.

Sixteen days before admission she had tonsillectomy and adenoidectomy performed under gas-ether for relief of enlarged inflamed tonsils and a very run-down condition. During the operation a tooth was broken off by accident. She did not know what became of it. The day after operation she went home with a very sore throat. The following day, November 10, she developed a through-and-through pain in the left chest not aggravated by deep breathing and not severe enough to prevent sleep. November 11 the pain shifted to her right chest and was much more severe, being needle-like. It was much aggravated by deep breathing and by lying on her right side or back. She had headache, profuse sweating and fever. November 15 she had the same symptoms and in addition had six or eight attacks of unproductive cough, each lasting about half an hour and causing her much distressing pain. November 17 she raised the first sputum, whitish and not foul. A district nurse found her temperature 103°. She felt very weak, sick and altogether exhausted. On waking the following morning she felt something "tear loose" in her right chest and coughed up a quart of lumpy, blood colored, very foul smelling and tasting sputum all at one time. This left her nauseated and weak but not faint. An hour later she coughed up a small amount of bright red frothy blood. Her chest pain was relieved by this, and her fever became somewhat less. For the past six days her condi-

tion had shown no improvement. She continued to have six to eight attacks of coughing daily, raising a cupful or more of greenish yellow very foul sputum, not bloody, more when she first woke in the morning. She had some cough at night which disturbed her sleep. She had slight pain in the right chest which was barely aggravated by coughing but was not a prominent symptom at the time of admission. The day of admission the sputum again became blood-streaked.

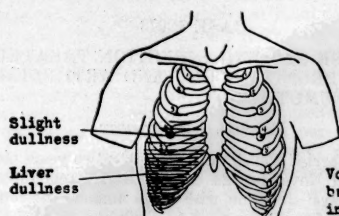
Clinical examination showed a poorly developed woman with marked pallor, occasionally coughing and raising watery blood-streaked foul smelling sputum containing cheesy lumps. There were few remaining teeth and marked pyorrhea. The spine showed left dorsal scoliosis. Lung expansion was better on the left than on the right. The lung signs were as shown in the

of bronchostenosis, and there is no definite evidence of foreign body." Nevertheless he thought bronchoscopy advisable.

His examination showed dullness, diminished breathing, no bronchial breathing, and a few fine non-crepitant râles in the right lower chest front and back; tactile fremitus normal.

The night of November 28 the patient coughed a good deal and had much chest pain. The next morning she coughed up half a cupful of bright red blood. In the evening she had a temperature of 104.5° and a pulse of 145, but was not coughing so much.

December 1 bronchoscopy was done at the Eye and Ear Infirmary. December 3 the patient returned feeling very much better. In the next two days her temperature came down, she coughed less and was more comfortable. In view of her improvement and the apparent inaccess-



Voice sounds and breath sounds increased.

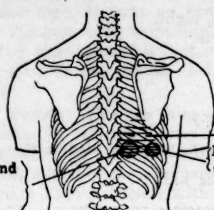


diagram. The heart sounds were not of good quality. There was a systolic murmur. The blood pressure was 95/70. Vaginal examination showed a very lax perineum and an anteverted uterus.

Before bronchoscopy the urine was not remarkable; the leucocytes were 12,000 to 17,650, the polynuclears 80 per cent. Wassermann negative. The sputum was mucopurulent at three pre-operative examinations, foul in odor, showed gross blood at all examinations, cocci at two, rods at one, bacilli at another, myriads of fusiform bacilli at the third, with many streptococci and two or three spirochetes per field.

X-ray November 27 showed an area of increased mottled density with indefinite margins, extending outward from the right lung root nearly to the midchest. The midportion of the right lung field was smaller than the left, and the intercostal spaces somewhat narrow, suggesting limited expansion of the lower right chest.

Before the first bronchoscopy the temperature was 99° to 104.5°, the pulse 100 to 145, the respiration 20 to 37.

A lung consultant reported, "The history of loss of part of a tooth during the operative procedure, and as we understand no knowledge of what became of the fragment, suggests that a foreign body may now be concerned in the process. The physical signs are not suggestive

sibility of the region involved the lung consultant advised against surgery, but was in favor of further bronchoscopic procedure.

December 8 she was again transferred to the Eye and Ear Infirmary for treatment. December 10 she returned. She had considerable bleeding after her return. December 13 artificial pneumothorax was done, and 800 cubic centimeters of air was injected into the right pleural cavity. She felt quite well after this procedure. The following day 0.3 grams nearsphenamin was given. December 16 another artificial pneumothorax was done and 850 cubic centimeters of air injected. X-ray showed partial collapse of the lung, but with many adhesions binding the parietal and visceral layers together. The patient had less cough and sputum each day, and the sputum was much less foul-smelling.

December 19 she complained of pain in her left back. Examination showed nothing remarkable. She was bringing up a small amount of blood, but the red count was about 3,500,000. The temperature was 105.5°, the pulse 150, the respiration 44. December 20 0.3 grams of nearsphenamin was given. At X-ray examination no normal lung markings were visible. The heart and mediastinal contents were displaced to the opposite side. In the lower part of the chest the shadow of the collapsed lung was visible. No evidence of fluid. December 25 she was

coughing less but was still very ill. December 27 the lung consultant found resonance and diminished breathing, slightly amphoric, above the right scapula, and dullness and diminished breathing below it; the heart displaced to the left; no splash. The temperature was 100° to 102°. She was coughing less and raising no

few cocci, one spirochete to every two fields December 27, one to nearly every field December 29.

December 30 the patient began to cough up bright red blood. She was given morphia and pituitrin. She raised about ten ounces of blood, then seemed unable to cough up any more. Her

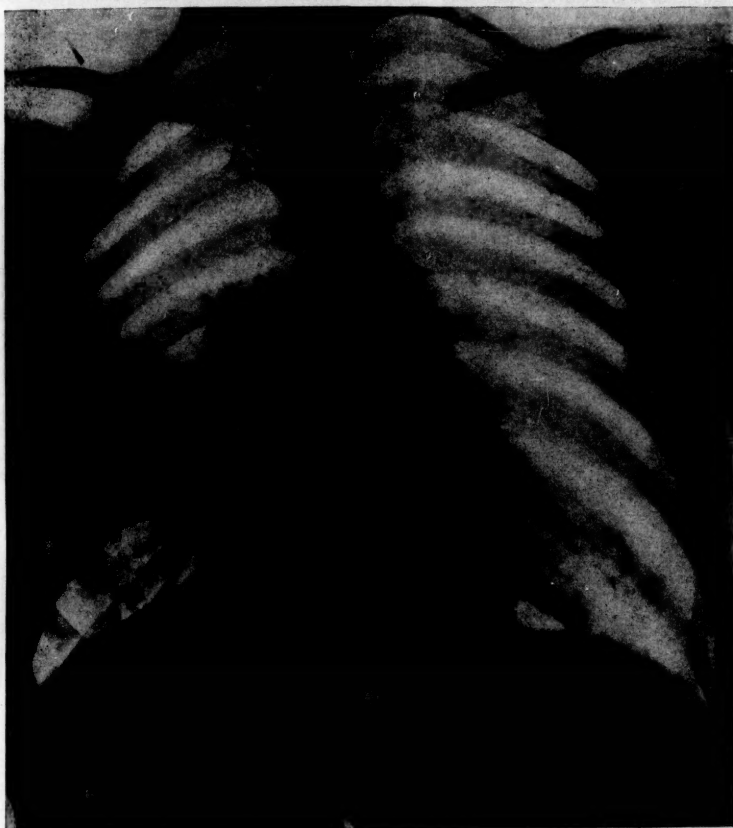


PLATE I. Taken at entrance. Shows an area of increased mottled density with indefinite margins extending outward from the right lung root nearly to the midchest. The midportion of the right lung field was smaller than the left, and the intercostal spaces somewhat narrow, suggesting limited expansion of the lower right chest.

blood. The leucocyte count however was still above 35,000 and the temperature continued elevated. By X-ray the right costophrenic sinus was not so clear as before. It was thought that there might be a little fluid in the right chest. Clinical examination however failed to show evidence of fluid. Sputum examination with Fontana stain showed many fusiform bacilli, a

chest was not examined, but there were palpable râles all over as the bronchial tree became inundated. A portable X-ray showed a large amount of air in the right chest, and a well marked fluid level which seemed to shift. She became very dyspneic and cyanotic, lost consciousness, and an hour after the onset of the attack died.

DISCUSSION

BY DONALD S. KING, M.D.

NOTES ON THE PHYSICAL EXAMINATION AND
X-RAY PLATES

As the lung signs developed later, they were largely a matter of dullness at the right base with diminished breath sounds. The egophony,

This place in the first X-ray plate could be interpreted as a cavity with a fluid level. It is not of course the definite cavity with fluid level that we sometimes get in lung abscess.

It is pretty difficult to localize the pathology from the second plate, because it is very difficult to know in what position the patient was lying and where the X-ray tube was.



PLATE II. Taken December 20. No normal lung markings are visible. The heart and mediastinal contents are displaced to the opposite side. In the lower part of the chest the shadow of the collapsed lung is visible. No evidence of fluid.

increased breath sounds, increased voice sounds, etc., were not constantly present.

In other words she was a very sick patient with a lung infection which we would all think of right away as abscess, having followed so closely on an operation for tonsillitis and the patient having suddenly raised a large amount of very foul sputum.

I may say that it was rather difficult actually to locate the abscess by X-ray. We shall take up the matter of the lipiodol plates in a minute. But Dr. Lord and Dr. Whittemore both felt that it was an abscess near the root rather than near the periphery, and that it was not accessible to surgery. The reason they advised another bronchoscopy was in the first place that it might fa-

vor drainage. She had improved remarkably after her first bronchoscopy. They kept a chart on the ward of the amount of sputum which the patient raised. The bronchoscopy was done here and after it she raised a great deal more sputum for a few days, and really felt very much better. So it was thought worth while to bronchoscope her again, having in mind at this time the probability of an artificial pneumothorax which would be more effective in clearing out the abscess, if they were sure of drainage through the bronchus.

It is logical to drain an abscess by first getting free drainage through the bronchus, and then exerting pressure on the pleural side and squeezing out the pus, and that is what it was hoped might be done in this case.

The nearsphenamin was given in this case because spirochetes had been found repeatedly in the sputum. These were of course not the spirochetes of syphilis but the ones which are held by some to be the etiological factor in lung abscess.

On December 19 the pain was in the left back rather than the right, but nothing developed in the left side.

What they are looking for on Dec. 27 is empyema, and that is the problem they had in mind from that time until the patient died.

The fourth X-ray (Plate II) was taken on the 20th and the fifth on the 24th. The costophrenic sinus is certainly more dense than it was in the plate four days before. The last plate was taken the day she died.

Dr. Smyth, who did the bronchoscopy, and Dr. Balboni, who did the pneumothorax, are both here. It is a case on which most of the so-called modern studies of lung conditions have been made, bronchoscopy, lipiodol injection, artificial pneumothorax, and arsphenamin treatment for so-called spirochetal disease. I will ask Dr. Smyth to discuss the bronchoscopy findings, as he made them.

DR. D. CAMPBELL SMYTH: The question to decide was whether or not there was a foreign body. There was a history of a tooth being broken off during tonsillectomy. Careful examination afterwards revealed no signs of a tooth having been recently lost, and a house officer always notes in the record when a tooth is lost during operation. He is sure that no tooth was lost in this case. That does not however rule it out, and I was on the lookout as I went down for a foreign body. There was none present.

PRE-OPERATIVE DIAGNOSIS DECEMBER 1

Lung abscess?

FIRST BRONCHOSCOPY

A nine-millimeter aspirating bronchoscope was passed into the right bronchus as far as the

terminal bronchus. Not much secretion was encountered, but very foul odor. Mucopus was seen to exude from the inner of the two terminal bronchi. 20 cubic centimeters of lipiodol was introduced into this bronchus and X-ray plates were taken. No foreign body was encountered.

PRE-OPERATIVE DIAGNOSIS DECEMBER 8

Lung abscess, right hilus region.

SECOND BRONCHOSCOPY

A thin trickle of mucopurulent pus was seen to come from the inner of the two terminal bronchi of the right main external bronchus. There was very little reaction encountered in the entrance of the bronchus, and no foreign body was found. A suction cannula was inserted in the terminal bronchus, the bronchus cleansed, and 25 cubic centimeters of lipiodol injected for X-ray plates.

FURTHER DISCUSSION

DR. SMYTH: It would be interesting to have the previous history of this woman. We know nothing about her before sixteen days after operation, and yet I am convinced from bronchoscopy that there was an old process down here. As I got down to the terminal bronchi there was a decided narrowing of one of the branches and pus was seen exuding. It was not due to an acute inflammatory condition. It was a chronic narrowing as there was no inflammatory reaction about it.

I am sorry that the best plate is not here, which shows the bronchoscope in place and the cannula. The cannula just fitted the terminal bronchus, and after it was aspirated the lipiodol was put in.

We are struggling to get more help from lipiodol, but at present we are unable to say from its use whether an abscess is present or not. Lung abscess cavities are quite different from tuberculous cavities, which are easily injected.

This lateral plate shows that this was central. The posterior terminal bronchus always gives a shadow over the spinal column.

This was a central process evidently about the middle of the lower lobe.

I should like to know why the tonsillectomy was advised and what her past history was.

DR. KING: She had been in a very run-down condition. They were trying to find some reason for it, and it was said that her tonsils were very badly infected. This was felt to be a contributing factor to her general condition. We have no story of any previous disease such as tuberculosis.

DR. SMYTH: As I look back on the bronchoscopy end of it I am convinced of two things:

first, that there was an old process in that terminal bronchus sometime before, and second, that there was no foreign body present causing an abscess.

DR. KING: You do not feel that this is necessarily a cavity filled with lipiodol?

DR. SMYTH: That is the problem we are struggling with, and we are starting to take stereoscopic plates to find out whether there is breaking down of lung tissue or not.

DR. KING: Is it possible that even in a normal lung lipiodol injected with the bronchoscope into a terminal bronchus would give findings similar to these, or must there be pathology to give that picture?

DR. SMYTH: There must be pathology, because I do not believe that normally we should replace the air with the lipiodol. This means definite pathology, but does not necessarily mean a cavity.

DR. KING: It is interesting that this collection of lipiodol is below the area of infiltration as shown by ordinary X-ray plates.

DR. SMYTH: I have observed that time and again,—that the places that will fill with lipiodol have their dense area outside.

DR. KING: But you still think the pathology is down in the lipiodol region?

DR. SMYTH: I think the dilatation of the terminal bronchi has taken place there.

DR. KING: Isn't it true that Dr. Whittemore has operated on some cases and has not found anything like the large cavities apparently indicated by the lipiodol?

DR. SMYTH: Yes, he has operated and found that we have superimposed small cavities, giving the appearance of a large one with lipiodol.

DR. KING: It is interesting to me that Dr. Smyth raises the question whether the adhesions that were apparently preventing complete collapse of the lung after artificial pneumothorax were of recent formation or whether they might have been there before, from a previous pleurisy. This is important, because there was a feeling on the part of some that if pneumothorax had been done three weeks earlier we might have collapsed the lung, whereas by waiting three weeks adhesions had had a chance to form and prevent the collapse.

DR. GERARDO BALBONI: When pneumothorax was advised in this case the patient had been very sick for some weeks and was still very sick. I think it is a mistake to wait too long to offer pneumothorax in a case of a deep seated lung abscess, allowing the patient to go on with the temperature and the absorption of septic material.

The first air given did not bother the patient very much. Then as she seemed to be better we gave her a second injection of air. That repre-

sents about 1500 cubic centimeters of air. Perhaps it was a mistake in this particular case to have given that much, on account of her having such an adherent lower lobe, but in view of the fact that she was bleeding we felt justified in giving her that amount.

When I later examined the patient I found that she had fluid, although the X-ray did not show it, and when I examined her at another time I still felt that there was fluid in the pleural cavity. My feeling then was that she should have been immediately tapped, because it was undoubtedly a septic fluid, and she looked very ill. Perhaps it was a mistake in judgment or perhaps not, but I would have felt much better if the patient had been tapped and drained and had then died. She was septic, she was at a low ebb all through, and she did not have an even chance no matter what we did for her. I really believe that the pneumothorax helped her to die earlier than she would have. She would have died eventually, I think, with her hemorrhages, but the pneumothorax with an empyema on top and the generally weakened condition helped her to die quicker than if she had not had the pneumothorax. She might have been saved if we had drained her and given her a chance to reduce the septicemia.

This case and three other cases that I have seen form an interesting group. This was a lower lobe case with adhesion to the diaphragm. Another was an upper lobe case that had been drained for abscess and had hemorrhages and came in in a very serious condition. Pneumothorax in that case was attempted in the hope of stopping the bleeding, but in that case the adhesions were in the upper lobe and the bleeding from the upper lobe. Pneumothorax could not possibly do him any good in view of what we saw at the necropsy.

In that case too I am rather inclined to think that perhaps pneumothorax, though it compressed the lower part of his lung, could not do anything to the upper part of his lung, and if anything I think that the pressure from the lower rather opened up the bleeding area more than closed it.

There was another case that did very well with pneumothorax. The sputum was greatly reduced, and the patient was doing well, when suddenly he had a severe hemorrhage and died. This case was of long standing and had previous to the pneumothorax several hemorrhages. The upper lobe was adherent and no amount of pressure could collapse the cavity. In these cases where there has been severe bleeding and the lung can not be collapsed it is doubtful if we are accomplishing much with large amounts of air. In these cases we have to go slow and give small amounts, and see how much collapse has been obtained. The danger of pneumothorax

with adhesions is that one or more of the adhesions break on the visceral side of the pleura and empyema develops. We have had three cases where an empyema developed. These were immediately drained, and after a long tedious convalescence recovered. The other is still fighting on. As soon as a patient with a lung abscess develops fluid, it is advisable to have an exploratory puncture at once, whether the X-ray shows some fluid or not. If the fluid obtained should be pus it should be drained. Immediate drainage usually decreases the sepsis.

DR. KING: Do you think that the thing that is holding this lower lobe out is adhesion, or is it merely a pneumonic process above the abscess?

DR. BALBONI: I think it is the lower lobe of the lung adherent to the diaphragm. There may be a pneumonic process too. I can not say as to the latter. When it is a simple adhesion preventing a collapse usually the air goes around that. A lobe adherent to the diaphragm as in this case is impossible to collapse, and naturally you can not get the results desired.

DR. KING: Do you think that if pneumothorax had been done earlier she might have been saved?

DR. BALBONI: I believe that a patient with a deep seated abscess which is in communication with a bronchus as in this case should have pneumothorax as early as possible. But always be prepared for some of the complications, as no one can tell beforehand what the condition of the pleura is. Occasionally we are able to tell beforehand on fluoroscopic and X-ray examination if the lung is adherent to the diaphragm or the pleura, but not until some air has been injected into the pleural sac can one be certain.

DR. SMYTH: I should like to ask Dr. Balboni where the severe bleeding came from in this case in his opinion?

DR. BALBONI: It came from the lower lobe, which could not be collapsed, being adherent to the diaphragm. This patient had had several severe hemorrhages before pneumothorax was attempted. She was running a high temperature and raising a very large amount of sputum and at times much blood. It seemed to be a case for pneumothorax. There seemed to be no other method to control the hemorrhages. Pulmonary hemorrhage is always a severe condition to deal with.

DR. SMYTH: Was the final bleeding into the pleural cavity?

DR. BALBONI: I do not think so.

DR. SMYTH: That terminal fluid was not blood?

DR. KING: She died of hemorrhage though, didn't she?

DR. BALBONI: I do not think that the terminal fluid was blood. I think it was a straight case of empyema that developed following the

break of some adhesion. Death was due to a combination of causes, not from hemorrhage alone, but from the septicemia and the extremely weakened condition, and the hemorrhage as a climax. Unfortunately no exploratory puncture was done. Nevertheless I feel certain that the fluid shown by X-ray is pus, as the last thing the patient had was a hemorrhage. Perhaps it would be right to say that the hemorrhage was the immediate cause of death.

As soon as a patient with a lung abscess develops fluid following a pneumothorax, as may be evident by the physical signs or the X-ray findings, an exploratory puncture should be made and if pus is obtained it should be immediately drained.

SUMMARY

DR. KING: *Diagnosis:* The diagnosis in this case is lung abscess. This has to be made largely from the history and the large amounts of foul sputum. There was never definite X-ray evidence of cavity with fluid level. As Dr. Smyth noted in his comment, the value of lipiodol in outlining large abscessed cavities is still undetermined, and in this case it is not at all certain that the mass of lipiodol which showed in the plates after bronchoscopy was in an abscess cavity.

Bronchoscopy: From the standpoint of diagnosis bronchoscopy did not give much help in this case; but as noted above, it is of interest that the bronchoscopist felt that there was definite evidence of a chronic process in the right base. From the standpoint of treatment, the first bronchoscopy was a definite help in that it promoted further drainage through the bronchus and would therefore be of help in artificial pneumothorax if a successful collapse could have been obtained.

Artificial pneumothorax: Artificial pneumothorax can be successful in promoting the healing of lung abscesses only if there is a free discharge of the abscess into a bronchus and a free pleural cavity which will permit practically complete collapse of the lung. The chances of success would therefore seem to depend on the early institution of the pneumothorax before definite adhesions can form and before marked infiltration takes place about the abscess cavity. But since a certain percentage of early lung abscesses heal spontaneously, there is always the hope that surgical treatment and artificial pneumothorax may be avoided, and hence these are usually postponed. In a series of cases of lung abscesses observed in this hospital, Dr. Lord reports that approximately 20 per cent. of abscesses observed in the first eight weeks have healed spontaneously. This does, however, leave 80 per cent. in which the outcome is doubtful, and the question is being raised more and more as to whether in an early abscess pneumothorax

should be instituted as soon as possible. In making the final decision, certain dangers of pneumothorax, treatment must be borne in mind: first, the slight danger of air embolus and second, the possibility of causing the abscess to rupture into the pleural cavity.

It is probable that in this case the artificial pneumothorax did bring about the empyema and possibly that early drainage of the empyema might have prolonged life as Dr. Balboni suggests. However, the signs of fluid were very slight until the day of death, and it is very doubtful whether with a patient as septic as this one and having such profuse hemorrhage the empyema drainage would have had any real effect.

Arsphenamin treatment: A number of series have been reported in which by special staining spirochetes have been demonstrated in the pus from lung abscesses. It is claimed that these organisms are found only in lung abscesses and not in other types of infection, and there are a number of men who take the view that this organism is the etiological factor in these cases. Hence arsphenamin treatment has been instituted in many cases with apparently good results. This treatment deserves further trial. In this particular case, of course, it was not to be expected that such treatment would produce striking results.

DIAGNOSIS

Abscess of the lung.

ARMY AWARDED PRIZE ON ITS "WOUND CARDS"

THE Army Medical Department has been awarded the gold medal of the International Committee of the Red Cross, the first prize in the competition of "wound cards" held at Geneva recently in connection with the meeting of the International Standardization Committee, the Department of War announced December 29.

The full text of the statement follows: Maj. Gen. Merritte W. Ireland, Surgeon General of the Army, has been advised by American Red Cross Headquarters that the Army Medical Department has been awarded the gold medal of the International Committee of the Red Cross. This award is first prize in the competition of "wound cards" held at Geneva recently in connection with the meeting of the International Standardization Committee.

The "wound cards" exhibited by the United States Army are the Standard forms known as the "Emergency Medical Tag," and the "Field Medical Record," employed by our Army in the field for tagging our sick and wounded for evacuation and record purposes. In addition to their technical value in connection with the

treatment of each case, these forms are eventually filed in the War Department at Washington. They then become very valuable in connection with the military record of the patient and in the adjustment of claims for pensions and compensation. They are also of great value in the study of medical history.

The first of these tags is attached to the soldier's clothing at the time he receives first treatment for sickness or wounds. The other is attached when he is first transported to a hospital. Both tags remain with the patient until medical treatment is finally terminated, possibly months later. These tags constitute a continuous record of the medical treatment and assure a continuity thereof.—*U. S. Daily*.

REPORT OF THE COUNCIL ON PHYSICAL THERAPY

ON THE SALE OF ULTRAVIOLET GENERATORS DIRECTLY TO THE PUBLIC

THE Council on Physical Therapy of the American Medical Association, on the basis of the present available evidence, is convinced that the sale of generators of ultraviolet energy to the public for self-treatment is without justification. The Council bases its condemnation of the sale of such apparatus for this purpose on the following grounds:

1. The uninformed public could not take the proper precautions in administering treatments and, as a result, severe general burns or grave injury to the eyes might ensue.

2. Those not familiar with the possibilities of such apparatus would be led to place unwarranted confidence in the therapeutic value of such treatment by the claims that might be made in the literature advertising such generators, and to undertake to treat serious conditions not amenable to such treatment.

3. The unrestricted possession of such therapeutic means would tend to deprive people of expert diagnosis by encouraging them to make self-diagnoses.

4. Such practice would encourage the sale of useless and fraudulent lamps which would be advertised as generators of ultraviolet rays, since the public would have no means at its disposal to determine the quality or quantity of the radiant energy emitted by such lamps.

For the foregoing reasons, the Council on Physical Therapy considers as detrimental to public welfare the sale or the advertising for sale, directly to the public, of a generator of ultraviolet energy. Under rule 11 of its Official Rules, the Council will declare inadmissible for inclusion in its list of accepted devices for physical therapy apparatus manufactured by a firm whose policy is in this matter detrimental to public welfare.—*The Journal of the American Medical Association*, Jan. 22, 1927, Vol. 88, p. 245.

THE BOSTON Medical and Surgical Journal

Established in 1828

Published by The Massachusetts Medical Society under the jurisdiction of the following-named committee:

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SUBSCRIPTION TERMS: \$5.00 per year in advance, postage paid for the United States, \$7.50 per year for all foreign countries belonging to the Postal Union.

Material for early publication should be received not later than noon on Saturday. Orders for reprints must be sent to the Journal office, 126 Massachusetts Ave.

The Journal does not hold itself responsible for statements made by any contributor.

Communications should be addressed to The Boston Medical and Surgical Journal, 126 Massachusetts Ave., Boston, Mass.

AN IMPORTANT HEARING ON MEDICAL REGISTRATION

On Wednesday, February 23, at 10:30 A. M. the Legislative Committee on Public Health will hold hearings upon two portions of the Address of the Governor. The recommendations that the Board of Registration be given discretionary powers to pass upon the qualifications of medical schools, and the recommendations relating to an increase in the penalty for illegal practice of medicine will be considered. Instead of hearings upon specific bills, the questions will be first whether the recommendations of the Governor are to be adopted or rejected, and second if adopted, what shall be the text of the bills to be drafted.

In the summer and autumn of 1924, a Recess Committee after extensive study and many hearings suggested among other things that the present law be amended so that the Board of Registration instead of being compelled as now to examine graduates from any legally chartered medical school should be required to examine only graduates from any legally chartered medical school "approved by the board."

The addition of those four words "approved

by the board" meets the wishes of the Board and is endorsed by the Joint Committee on State and National Legislation of the Massachusetts Medical Society and the Massachusetts Homeopathic Medical Society.

The reasons for asking this change in the law are simple. Schools in Massachusetts, in other parts of the United States and in foreign countries are now allowed to send their graduates to the Massachusetts Board for examination. The graduates of certain of these schools are known, in very large numbers, to fail in their examinations.

The proportion of failures is so great as to make it reasonable to infer that the training received in certain schools must be inadequate, even for those graduates who succeed in becoming registered.

The recommendations of the Recess Committee and now of the Governor would so far as Massachusetts is concerned compel all medical schools to maintain a reasonable standard of efficiency. Such a standard would protect students seeking an education and would protect the public from poorly trained practitioners. It would work no hardship upon the authorities of any school with proper ideals of civic responsibility.

Yet there is every reason to suppose that very powerful opposition will be aroused against the recommendations of the Governor. If the standards of the medical profession are a matter of concern to the physicians of the States, it is their duty to make their influence felt. This matter concerns every individual. The Governor has redeemed his pledge to do his bit to better the standards of medical practice in the Commonwealth. Every physician with pride in his profession and with any sense of responsibility beyond his own immediate interests ought to support a fearless Governor in his attempt to protect the public from inadequately trained practitioners. The facts should be made plain to every member of the Legislature and particularly to the members of the Committee on Public Health, which is made up of Senators Clegg of Methuen (Chairman), Bliss of Malden, Warren of Arlington and Shuebruk of Cohasset; Representatives Walker of Westborough (House Chairman), Holden of Attleboro, Donaldson of Brockton, Rice of Framingham, Ashton of Fall River, Gatineau of Southbridge, Estabrook of Haverhill, Holmes of Brockton, Birmingham of Boston, Kennedy of Boston and L. R. Sullivan of Boston.

Will you, reader, do your share and do it now!

THE CANCER PROBLEM

So much has been said and written on this subject that many seem to feel that there is little more to be done, but a large proportion of the

people are even now uneducated or unconvinced with respect to the responsibility which should be assumed in coöperating with efforts to prevent human suffering in this particular field. The multiplicity of appeals put forward for material support or endorsement of public health and voluntary agencies operate to dull the appreciation of specific demands. The work so far done has accomplished some good results in saving life, but its success should stimulate to greater efforts because thus far little more is known than that excision, X-ray, radium, and perhaps Bell's treatment have been effective in curing a small proportion of cases or ameliorating conditions in the incurable cases and that this small percentage of cures has not led the great mass of sufferers to make use of the approved remedies at the time of greatest possible benefits. The most important question, that of etiology, is unsolved, except in those cases where irritants and the X-ray have caused the disease. But even in these cases no adequate explanation has been given for the development of cancer among those exposed to these agencies. Theories have been advanced which appear to be only ingenious speculations and even with the beneficial therapeutic agents employed, nothing has been found which prevents cancer from taking a higher place among the diseases which destroy human life. The theory, endorsed by a considerable number that cancer is a disease of civilization seems to be reasonable only because of the fact that it is climbing to a higher figure in mortality records.

Perhaps the larger resource may lie in the benefits which have come through publicity propaganda with the hope that the desired information will gradually reach the largest possible number. This plan is being carried on by voluntary and official organizations and it is the duty and privilege of the medical profession to augment all plans under way by the various reputable bodies engaged in this work. Here in Massachusetts the State Department of Public Health is especially in need of support in carrying the burden imposed by legislative enactment. The Commissioner has a most difficult task in that certain specific duties have been imposed and in order to meet the demand for dealing with cancer as it exists he must have an equipment and facilities which call for large appropriations. His especial difficulty will be found in getting the support of the legislature which is largely a lay body quite unable to understand the problem *per se* and naturally conservative in appropriating money unless convinced that its expenditure will produce results. There is no suspicion that doubt as to the wisdom of the recommendations of the Commissioner for authority to purchase more than a hundred thousand dollars worth of radium is prompted by any motive other than economy in the minds of the legislators but unless the leg-

islature is led to feel that the profession is endorsing every move made by the Department of Public Health it may feel disinclined to make needed appropriations. The legislature may be likened to the old Egyptians who expected the Jewish captives to make bricks, but declined to furnish the requisite straw. The profession must help the Commissioner to convince our lawmakers that the movement to deal with cancer is a warranted experiment and that he should be given discretion as to details.

Another very important step should be carefully considered and this is the compulsory reporting of cancer cases. Before we can expect the people to put aside prejudice and acquire a scientific state of mind there must be a great deal of work performed. The natural reluctance to have one's disease recorded will appeal to many and to some this plan will seem heartless, but it may be of advantage and could be conducted in a way to avoid general publicity. Of course doctors will not at first cordially approve any plan which involves extra work, but the campaign could be begun within the profession and some progress would follow. One result of reporting of the disease by physicians might lead to earlier and more accurate diagnoses and this would be a definite step forward. The Massachusetts Commissioner of Public Health has stated that he does not feel that the time has come for reporting cancer cases, although Frederick L. Hoffman and others are advocating the adoption of this plan.

The cordial approval of the establishing of cancer clinics by some of our more progressive physicians is indicative of a spirit of coöperation which is encouraging.

THIS WEEK'S ISSUE

CONTAINS articles by the following named authors:

SHEDDEN, WILLIAM MARTINDALE, A.B.; M.D. Harvard Medical School 1920; Assistant Surgeon to Out patients Massachusetts General Hospital and the Collis P. Huntington Hospital, Boston. His subject is: "The Results of Surgical Treatment of Epithelioma of the Lip from the Massachusetts General Hospital and the Cancer Commission." Page 262. Address 270 Commonwealth Ave., Boston.

McCLURE, CHARLES W., M.D. Ohio State University College of Medicine 1910; Chief of Gastrointestinal Research, Evans Memorial, Boston. Address: 483 Beacon St., and

HUNTSINGER, MILDRED E., B.Sc.; Chemist of the Department of Biochemistry, Evans Memorial, Boston. Address: Evans Memorial, Boston. They write on "Observations on Migrate." Page 270.

MISCELLANY

UNITED STATES PUBLIC HEALTH SERVICE

CHANGES of duties of surgeons January 26, 1927.

Surgeon H. McG. Robertson—Directed to proceed from Boston, Mass., to Wilmington, Mass., and return, for conference with physicians and health authorities relative to public health matters. Jan. 19, 1927.

Surgeon Charles Armstrong—Directed to proceed during the remainder of the present fiscal year, from Washington, D. C., to such places in the United States as may be necessary, and return, in connection with investigations of vaccination against smallpox.

INTERNATIONAL POST-GRADUATE MEDICAL COURSES

INTERNATIONAL medical courses for post-graduate studies will be held at Berlin in the months of March and April, 1927. They will be arranged by the Faculty of medicine of the University of Berlin, the organization of the Kaiserin Friedrich-Haus and the association of University-lecturers for medical vacation-lecturers at Berlin.

SUBJECTS

1. "Progress of Medicine With Special Consideration of the Latest Therapeutics." (1-12 March.)
 2. "Diseases of the Heart, the Kidney and the Vessels." (14-23 March.)
 3. "Scientific Knowledge About Rays." (24-31 March.)
 4. Single courses on all branches of medicine, partly lasting a fortnight (14-26 March), partly lasting four weeks (1-26 March). These courses are combined with practical laboratory work and demonstrations of patients.
 5. "Diagnostic and therapeutical technics" in the sick-rooms and laboratories of the municipal infirmary "Am Urban." (1-14 April.)
- Besides these courses there will be opportunity for clinical and laboratory work in the internships of the important hospitals of Berlin, also for pathologic anatomical work.

All information may be obtained from Kaiserin Friedrich-Haus, Berlin NW 6, Luisenplatz 2-4.

NEWS RELATIVE TO THE BOSTON TUBERCULOSIS ASSOCIATION

ONE thousand dollars has been received thus far from the first follow-up letters sent out by the Boston Tuberculosis Association in an effort to secure returns from the Christmas Seals. This brings the total up to \$46,500 which is

\$4,500 less than the amount received in the 1925 Seal Sale. The books will not be closed until the first of April so there is still time for those who have not yet replied to do so at once.

Bernice W. Billings, Executive Secretary of the Boston Tuberculosis Association, has left for Memphis, Tennessee, to give a lecture before a group of social workers. She has just been appointed to the Program Committee of the National Tuberculosis Association and will assist in the arrangements for the National Meeting which is to be held in the early Spring. The subject of Miss Billings' talk at the meeting in Memphis will be "Relationship of Health Work to all Fields of Social Work." Prominent doctors and health workers from all over the United States are to give lectures at this meeting.

The Annual Meeting was held at the Twentieth Century Club, January 28th. Dr. John B. Hawes, 2nd, President of the Association and Dr. Haven Emerson delivered addresses.

DECLINE OF VETERINARY SURGERY

ACCORDING to the Federal Department of Agriculture, there is a shortage of Veterinary Surgeons in the country due to the reduction in the number of colleges devoted to training such men.

In connection with the Bureau of Animal Industry, the Department is an employer of veterinary surgeons and finds it difficult to secure a sufficient number of well-trained men to meet its needs. The total student enrollment in the thirteen recognized veterinary colleges in this country and one in Canada was only five hundred and eighty-two last year. Graduates numbered one hundred and and thirty-two, which is eleven less than in the preceding year.

The Bureau employs about thirteen hundred and fifty veterinarians, but frequent resignations deplete this number from time to time.

In dealing with medical inspections and diseases common to humans and lower orders, veterinarians are important coadjutors in public health measures.

Intelligent farmer boys have been found to be especially fitted for usefulness in this field if properly educated, for they usually have an understanding of animal life.

SOCIETY FINANCES OF THE MASSACHUSETTS SOCIETY FOR MENTAL HYGIENE

THERE is no question that a social organization like this Society should be conducted on sound financial principles. Preferably, no financial burden should be undertaken without funds either in hand, guaranteed, or reasonably

anticipated. Strict budgetary control should be rigorously in effect.

To bring this about, the Medical Director, with the advice and approval of the Executive Committee, has established a financial policy which will be gradually put into effect this year. This involves:

1. General expenses for the fiscal year shall be limited to \$13,500. New projects shall therefore be financed by special grants of funds obtained for the Society.

2. A Reserve Fund of \$5,000 shall be established to permit the financing of the Society's work in anticipation of income. Beginning with February 15, 1927, and on February 15 of every succeeding year, 5 per cent of all amounts (with certain exceptions) received by this Society for general purposes during the previous fiscal year shall be transferred to the Reserve Fund.

We hope that this new financial policy will meet with the approval of the members of this Society. In order to attain within a year or two our goal of \$5,000 as a Reserve Fund, it will be necessary to have special donations to this fund.

A contribution from any of our members or friends to this new fund will help to guarantee the continued activity of this Society, which is filling such an important community need, and will be greatly appreciated. Kindly designate your checks "Reserve Fund." If you wish to increase this year's donation with an amount to be placed in the Reserve Fund, please indicate the amount to be so allocated.

Of particular interest to the followers of the mental hygiene movement locally are the recommendations given below in a "Survey of Public Health of the City of Boston."

1. The present Mental Hygiene program of the Community Health association seems to us unusually sound and should be continued and expanded.

2. We heartily commend the recent addition to the staff of a second mental hygiene worker to relieve the great pressure which now exists in this department.

3. We believe, in view of the supreme importance of mental hygiene problems in all phases of public health nursing, that it would be of the greatest advantage to provide for the systematic instruction of the staff nurses in this greatly neglected field. In a given family, the chances are good that problems of mental maladjustment are fully as important as problems of disability and disease of all other sorts put together. Yet the public health nurse has had three or more years of training in dealing with physical handicaps, and has rarely devoted a week to the study of mental disease. We would urge that steps be taken to arrange with the Massachusetts Society for Mental Hygiene for special case conferences on mental hygiene,

which we understand the Society may be willing to provide; and that the possibility be also considered of arranging for the placing, first of supervisors, and later, if possible, of staff nurses, two at a time, at the Boston Psychopathic Out-Patient Department for a period of one month's experience in dealing with selected mental cases of the less aggravated types.

4. As in the case of Nutrition work, we would strongly urge the formation of a Joint Council on Mental Hygiene, bringing together physicians, medical social workers, and nurses dealing in this field, for coördination of routine work and for the formulation of a complete program of community development. We believe that the need for central coördination of clinic service and for a considerable increase in psychiatric social workers would probably be made manifest by such a study.—*Bulletin of the Massachusetts Society for Mental Hygiene.*

\$514,709 FOR CANCER FIGHT

A TOTAL of \$514,709 has been received toward the million-dollar endowment fund sought by the American Society for the Control of Cancer, it was announced by Winthrop W. Aldrich of 37 Wall Street.—*N. Y. Times.*

THE DANGEROUS ALCOHOLIC BEVERAGE

DR. CHARLES NORRIS, Chief Medical Examiner of New York in a report to the Mayor of that city states that most of the alcohol used as a beverage contains active poisons. He claims that although there were seven hundred and forty-one deaths in New York last year due to drinking alcoholic beverages, this does not show the extent of the effects of poisonous liquors and that the actual number of deaths due to these liquors far exceeds the recorded figures.

In Massachusetts the conditions seem to be less serious for a published statement in the daily papers records no evidence of wood alcohol in a large number of analyses of liquor sent in to the Department of Public Health.

INTERNATIONAL SOCIETY FOR CRIPPLED CHILDREN

THE sixth annual convention of the International Society for Crippled Children will be held in Cincinnati, February 16 and 17, with headquarters at Hotel Sinton. The society was organized in 1921 at Elyria, and through the program which has been carried out under its inspiration, there has been created an interest in the problem of reaching and helping the crippled child. Its general program this year looks toward coördination of efforts on the part of all organizations dealing with the cripple throughout North America.

CORRESPONDENCE

WORLD CONFERENCE ON NARCOTIC EDUCATION

Editor, Boston Medical and Surgical Journal:

The Board of Governors of the World Conference on Narcotic Education has adopted a resolution calling for a week to be observed throughout the world as Narcotic Education Week, the last week in February of each year, inviting individuals and organizations to adopt such measures as they may deem necessary and advisable for observing this week in the extension of narcotic education.

In pursuance of this resolution plans have been prepared for the coöperation of governments, national, state, provincial, municipal and of major organizations, including those relating to the pulpit, press, screen, radio, educational institutions, primary, secondary and higher education.

It is unnecessary for me to do more than mention the fact that the spreading of narcotic drug addiction has grown to the proportions of a major problem menacing to the future of civilized society.

I am writing on behalf of the press committee to urge that you lend your full coöperation in the observance of the week.

It is believed that this annual program of observance, with a knowledge of the truth properly and adequately conveyed to society, will awaken a forceful reaction in the environs of our world institutions which, repeated through the generations, will bring about manifold results in arresting the rapidly increasing ranks of the army of the "Living Dead."

Very cordially yours,

RICHMOND P. HOBSON, *Secretary General.*

Washington Branch of the Secretariat,
Rooms 820-821 Southern Building,
Washington, D. C.

ARTICLES APPROVED BY THE COUNCIL ON PHARMACY AND CHEMISTRY

Editor, Boston Medical and Surgical Journal:

In addition to the articles enumerated in our letter of December 27 the following have been accepted:

Robert A. Bernhard

Saf-T-Top Mercurochrome Solution 2 cc.

Kansas City Oxygen Gas Company

Ethylene for Anesthesia (Kansas City Oxygen Gas Company).

Elh Lilly & Co.

Erysipelas Streptococcus Antitoxin—Lilly (Concentrated Globulin).

Parke, Davis & Co.

Antistreptococcus Serum 20 cc. piston syringe.

Antistreptococcus Serum 50 cc. piston syringe.

Swan-Myers Company

Arizona Ash Concentrated Pollen Extract—Swan-Myers;

Crab Grass Concentrated Pollen Extract—Swan-Myers;

Goose Grass Concentrated Pollen Extract—Swan-Myers;

Mountain Cedar Concentrated Pollen Extract—Swan-Myers;

Ox-Eye Daisy Concentrated Pollen Extract—Swan-Myers;

Plantain Concentrated Pollen Extract—Swan-Myers;

Yellow Fox-Tail Concentrated Pollen Extract—Swan-Myers.

Yours truly,

W. A. FUECKNER, *Secretary,*
Council on Pharmacy and Chemistry.

THE DIAGNOSIS OF GALL STONES

Editor, Boston Medical and Surgical Journal:

Dr. Fallon's good paper in your issue of February third and his steadily decreasing post-operative mor-

tality in gall stone operations to less than 2% surely spell progress.

Dr. Fallon allows that in the diagnosis of gall stones "the history still plays a very important part." In my active days X-rays gave no diagnostic help, nor did any laboratory test. I was led to attach great significance to pain in the upper belly awakening the patient from sleep as suggestive of biliary colic; pain, of course, not reasonably attributable to the gut. I was inclined to compare gall stones to flying squirrels, more active at night. Mere discomfort or uneasiness prevent sleep or cause dreams, usually not cheerful. Acute and sudden pain breaking sleep seems to me a telltale. Osler does not mention this. Perhaps others do, but I am too lazy to search the scriptures fully.

Incidentally, I recall a middle-aged working woman who entered my ward at the Massachusetts General Hospital. Any possible doubts as to her having gall stones were removed by finding faceted stones in the stools. With much difficulty I persuaded her to face operation. The day she was transferred to the surgical service she passed one or more stones. These were her last, for the late Dr. John Homans found none on operation. Needless to say she did well.

Yours truly,

F. C. SHATTUCK.

CASES REPORTED TO THE MASSACHUSETTS DEPARTMENT OF PUBLIC HEALTH FOR THE WEEK ENDING FEBRUARY 5, 1927

Chickenpox	292	Ophthalmia neonato-	
Diphtheria	111	rum	23
Dog-bite requiring		Pneumonia, lobar	113
antirabic treat-		Scarlet fever	460
ment	10	Septic sore throat	2
Encephalitis lethar-		Suppurative conjunc-	
gica	3	tivitis	7
Epidemic cerebrospi-		Syphilis	35
nal meningitis	1	Tuberculosis, pulmo-	
German measles	14	nary	98
Gonorrhea	81	Tuberculosis, other	
Influenza	21	forms	17
Malaria	1	Tuberculosis, hilum	6
Measles	169	Typhoid fever	7
Mumps	293	Whooping cough	114

CONNECTICUT DEPARTMENT OF HEALTH

MORBIDITY REPORT FOR THE WEEK ENDING FEBRUARY 5, 1927

Diphtheria	35	Chickenpox	139
Last week	29	German measles	3
Diphtheria bacilli		Influenza	11
carriers	35	Mumps	23
Scarlet fever	116	Paratyphoid fever	1
Last week	104	Pneumonia, lobar	48
Typhoid fever	1	Poliomyelitis	1
Last week	6	Septic sore throat	2
Measles	60	Tuberculosis, pulmo-	
Last week	48	nary	30
Whooping cough	40	Tuberculosis, other	
Last week	61	forms	3
Bronchopneumonia	38	Gonorrhea	12
Cerebrospinal menin-		Syphilis	10
gitis	1		

During the last 50 years the death rate from cancer in Connecticut increased from 39.1 in 1875 to 106.2 in 1926. This shows that the problem is a serious one. Until such time as a cure has been discovered, and a preventive treatment found, the public should be educated to the precaution of having a yearly health examination.

Typoid fever has just made another great stride toward the vanishing point in Connecticut. Only 165 cases were reported for 1926 as against 265 cases the preceding year. This gives a rate of 10.6 per 100,000 population for 1926 which is about one-tenth the case rate 25 or 30 years ago.

NEWS ITEMS

HARVARD MEDICAL SCHOOL NEWS—*Henry Ehrlich Memorial Fund*—Additional information relative to this fund provides that: "The moneys given to these students is not to be considered by them as a loan, yet it is hoped that in later years, should they be in a satisfactory financial position, they will return the amount which they had received, to the original fund, thereby adding to same, and permitting greater numbers to receive assistance in the future."

Scholarship Awards—The following scholarship awards to the upper classmen of Harvard Medical School for the year 1926-1927 were recently announced.

Name of scholarship, to whom awarded, and year:
Edward M. Barringer, No. 1—Samuel Glenn Major, 4M.

Edward M. Barringer, No. 2—Alexander Marble, 4M.
Gordon Bartlett—Ira Milburn Dixon, 2M.
Matthew and Mary E. Bartlett—Dugald Stanley Holsclaw, 2M.

Lucius F. Billings—Ernest Frederick Bright, 2M.
Orlando W. Doe—Donald William Leonard, 2M.
Joseph Eveleth, No. 1—William Ronald Frazier, 2M.
Joseph Eveleth, No. 2—Walter Orville Blanchard, 3M.

Joseph Eveleth, No. 3—Thomas Alexander Cumming Rennie, 3M.

Horace Putnam Farnham, No. 1—Carl Henry McMillan, 4M.

Horace Putnam Farnham, No. 2—Robert Alvan Goodell, 3M.

Lewis and Harriet Hayden—Euclid Peter Ghee, 4M.
Lewis and Harriet Hayden—James Cling Whitaker, 4M.

Hilton, No. 1—Valy Menkin, 3M.
Hilton, No. 2—Anthony Vito Migliaccio, 3M.

William Otis Johnson—Frank Seymour Davenport, 3M.

Claudius M. Jones—Tom Douglas Spies, 3M.

Alfred Hosmer Linder—Herbert Dan Adams, 2M.
Joseph Pearson Oliver—Lewis Kalgier Sweet, 2M.

Charles B. Porter—Elbert Lapsley Persons, 4M.
Flavius Searle—Milton Leonard Miller, 2M.

Charles Pratt Strong—Ethan Theodore Colton, Jr., 2M.

Isaac Sweetser—Perry Cossart Baird, Jr., 3M.
John Thomson Taylor—Chauncy Valentine Perry, 3M.

Dr. Charles Walker, No. 1—Ettore Francis Carniglia, 2M.

Helen L. Walker, No. 2—Jibran Yusuf Skeirik, 2M.
Anna G. Walker, No. 3—Donald Norman Medearis, 4M.

Leslie W. Walker—Reginald Reed Steen, 4M.
Abraham A. Watson—John Kenneth Patterson, 2M.

Edward Wigglesworth—Joseph Ephraim Frank Riseman, 2M.

Cottling Gift—Parker Calhoun Hardin, 4M.
James Ewing Mears—William Edwin Davis, 3M.

John Foster Fund—Abraham Kaplan, 4M.
John Foster Fund—Gilles Edward Horrocks, 4M.

THE ROCKEFELLER INSTITUTE FOR MEDICAL RESEARCH, New York, announces the appointment to its scientific staff in the Division of Biophysics of Dr. Ralph W. G. Wyckoff as associate member and Dr. Sterling B. Hendricks as assistant, formerly of the Geophysical Laboratory of the Carnegie Institution of Washington.

THE MEDICAL SOCIETY OF THE STATE OF NEW YORK sponsored a dinner given at the Waldorf-Astoria in New York on the evening of Thursday, January 27, 1927, in testimony of appreciation of the distinguished services to organized medicine of Dr. Wendell Phillips, president of the American Medical Association.

Dr. Harry Emerson Fosdick and Dr. Frank Billings of Chicago delivered addresses.

GRADUATION OF NURSES AT THE MASSACHUSETTS GENERAL HOSPITAL—On Wednesday evening, January 12, the graduating exercises of the Massachusetts General Hospital Training School were held. Fifty-six nurses were graduated. Dr. George H. Bigelow, Commissioner of Public Health, delivered an address, and Sally Johanson, principal of the school, made her annual report.

Of this year's graduates, all but nine are from New England, Rhode Island alone not being represented. New York, Minnesota, New Brunswick, Nova Scotia and Quebec contribute to the list of 56. There are four bachelors of arts and a bachelor of science in the class.

The school admitted 120 students this year, with a waiting list. Among the important developments of the year have been the appointment of a nurse as instructor in the elements of public health nursing; authorization of the appointment of a physical-social director, and the equipping of one of the best science laboratories to be found in any school of nursing in the country. The duties of the instructor are to teach the public health point of view to the members of the school, place emphasis on prevention and introduce the students to the health agencies in the community. Her major work is with the nurses in the clinics of the out-patient department. The physical-social director will assume responsibility for organizing athletics, direct some of the recreational activities and chaperone excursions to Boston's places of interest.

Of the 1,734 graduates, the school has lost contact with only 40. On the basis of percentage, 10 in every 100 have died; 37 have married or retired; 16 are in private duty; 22 are in institutional work; and 11 are in public health nursing. Only 13 of the entire number have left health work for other activities. Every State in the United States and many foreign countries have known the service of graduates of the Massachusetts General Hospital Training School for Nurses. Seven have returned from foreign fields during the past year.

CLEVELAND—The General Education Board has announced a gift of \$975,000 to the Western Reserve University School of Medicine. Of this amount \$750,000 will be used to construct an institute of pathology. Dr. Robert E. Vinson, president, states. The new building will be constructed adjacent to the Babies and Children's Hospital, will be four stories in height and 157 by 55 feet, outside dimensions. Dr. Howard T. Karsner, professor of pathology, is to be the director of the new institute.—*Ohio State Medical Journal*.

NOTICES

AMERICAN BOARD OF OTOLARYNGOLOGY

The following examination dates have been assigned by the American Board of Otolaryngology:—

Washington, D. C.—Episcopal Eye, Ear and Throat Hospital, Monday, May 16, 1927, at 9 o'clock.

Spokane, Washington—Saturday, June 4, 1927, at 9 o'clock.

UNITED STATES PUBLIC HEALTH SERVICE

CHANGE OF STATION FOR SURGEON D. A. HOXIE

Assistant Surgeon D. A. Hoxie—Relieved from duty at U. S. M. H. No. 2, and assigned to duty at U. S. Quarantine Station, Gallops Island, Boston, Mass., January 28, 1927.

NOTICE OF EXAMINATION FOR ENTRANCE INTO THE REGULAR CORPS OF THE UNITED STATES PUBLIC HEALTH SERVICE

Examinations of candidates for entrance into the Regular Corps of the United States Public Health Service will be held at the following named places on the dates specified:

At Washington, D. C.	May 2, 1927
At Chicago, Ill.	May 2, 1927
At New Orleans, La.	May 2, 1927
At San Francisco, Calif.	May 2, 1927

Candidates must be not less than 23 nor more than 32 years of age, and they must have been graduated in medicine at some reputable medical college, and have had one year's hospital experience or two years' professional practice. They must pass satisfactorily oral, written and clinical tests before a board of medical officers and undergo a physical examination.

Successful candidates will be recommended for appointment by the President, with the advice and consent of the Senate.

Requests for information or permission to take this examination should be addressed to the Surgeon General, United States Public Health Service, Washington, D. C.

H. S. CUMMING, *Surgeon General.*

REPORTS AND NOTICES OF MEETINGS

THE WINTER MEETING OF THE MASSACHUSETTS ASSOCIATION OF BOARDS OF HEALTH

This meeting was held at the 20th Century Club, 3 Joy Street, Boston, Thursday, January 27, 1927, at 12:30 P. M.

The meeting was called to order by the President J. J. McGrath who called for reports of the committees. Dr. Safford, for the committee on Legislation presented a draft of parts of the bills dealing with public health matters which he felt should be very carefully considered by the members of the Association. He was unwilling to advocate approval of the passage of

these bills, but simply presented them for personal consideration of the different members.

Dr. Sylvester called attention to the composition of the Committee on Public Health of Massachusetts Legislature and read the list of the members suggesting to the members of the Association that in all matters affecting public health, these members of the Committee should be interviewed and instructed as to what would be best for the Commonwealth of Massachusetts.

The following officers were elected for the ensuing year:

President, J. J. McGrath; 1st V. Pres., M. V. Safford; 2nd V. Pres., J. U. Paquin; Secretary, S. L. Malony (Boston); Treasurer, F. G. Curtis; Ex. Com., J. O. Jordan, D. E. H. Guild, G. H. Lennon, L. A. Jones, L. U. Paquin, E. H. Trowbridge.

The special business of the afternoon consisted of two addresses, one by Dr. J. S. Stone, President of the Massachusetts Medical Society and the other by Dr. George H. Bigelow, Commissioner of the Massachusetts State Department of Health.

Dr. Stone's address was under the title of "The Medical Profession and the Cancer Problem." He called attention to the fact that cancer and degenerative diseases are increasing and many others which were formerly public health problems such as typhoid, diseases of infancy, and common communicable diseases are decreasing. Tuberculosis stands as a particular evidence among other communicable diseases of the benefits which have accrued through constant efforts to prevent occurrence and to cure those affected so that at the present time the average span of life is being increased to the period when cancer and certain degenerative diseases are likely to develop. In few words, more people live to the cancer age. So much information has been disseminated that people no longer regard cancer as a disgrace, but they have come to know that early diagnosis and prompt treatment is the resource of the cancer patient.

Recently the public became impatient because the medical profession had not taken the initiative in developing a cancer program, and this feeling led to legislation which has presented a definite program before the authorities of the State and the Public Health Department who are now trying to meet the mandates of the legislature. The further knowledge of cancer may not prevent its spread as in the case of communicable diseases but will lead up to the methods of control and cure which are to be hoped for. As one of the particular responsibilities of the State Department of Public Health, it will become necessary in order to provide equipment for the Norfolk Hospital to purchase radium, and it should be recognized that the purchase of radium is a dangerous experiment unless carefully controlled in a well conducted

hospital. In addition to the responsibility put upon the State Department of Health, the medical profession must be taught to assume its part in this cancer campaign, and Boards of Health and voluntary agencies must participate in efforts to bring about the best possible results.

So far as hospitals are concerned at the present time, the Huntington Hospital is ideal as a center of study because it furnishes the most advanced methods of research by eminent specialists and treatment by surgeons and X-ray men who have the cooperation of eminent physcists. Cooperation among these groups makes this hospital very useful, and it will be necessary that cooperation should be developed all through the State on the part of physicians and local boards of health.

Another feature of this movement is the developing of cancer clinics in order that early cases will be recognized and referred to the State Hospital and to specialists. The State law was enacted partly on the supposition that the medical profession had not shown constructive interest, as shown in the provision that the law must be carried on with or without the medical profession. But he felt confident that the medical profession will cooperate most heartily.

The next speaker, Dr. George H. Bigelow, continued the discussion of the cancer problem and testified to the cordial support which he had received from the medical profession. The problem was first brought to his attention something like two years ago with instructions that it should be studied because of the fact that Massachusetts has the highest incidence of cancer of any of the states in the union. Other facts of interest are that the average interval between the occurrence of cancer and the diagnosis is eight months and that the chance of cure in a case of cancer loses 16% with each month of delay. The present hospital facilities in the State provide about 400 beds outside of the Norfolk State Hospital. This hospital will be ready for cases some time this spring and will admit patients upon application from physicians and the clinics. The problem of the terminal case is more that of narcosis than of treatment of cancer per se, but the hospital will be obliged to treat both the curable and the incurable cases. This brings into play a complicated problem because it is difficult to arrange for the association of free and part-paying patients. Another part of the program will consist of education similar to that which has been carried on by the tuberculosis and other associations, dealing with communicable diseases. The clinics will have the assistance of physicians and lay organizations, but there will of necessity have to be certain types of social service in a follow-up system. So far as reporting of cases of cancer the Department of Public Health feels that the time for this prac-

tice has not arrived because a system of reporting diseases without a proper service would be a serious disappointment and it often clutters up the records and would prove of very little use.

One forward movement has taken place in certain centers of which Newton stands as the type, where the doctors have developed a clinic. Although there is before the Legislature, House Bill No. 320 relating to the reporting of cases of cancer, he did not feel that the time was ready for us to enter upon that practice. He thought that local departments of health should be recognized as having authority and functions regarding public health work which should not be interfered with or changed. Cancer is not the only problem which is looming up because in a few years we shall not only have cancer but heart and other degenerative diseases which will require very definite attention by health organizations, but here again there will be no advantage in reporting them until a service can be developed which will be effective in dealing with them.

He called attention to the matter of typhoid legislation which is designed to protect people from the carrier; and while the bill now on file was intended at first merely to refer to typhoid, it has been expanded to cover carriers of other diseases. This bill was scheduled for February 14. He felt that the local boards of health should have authority to stop the sale of food which may have been contaminated by carriers of disease, and further that authority should be given to local and State Departments to conduct experiments for the detection of possible carriers.

The bill to require pasteurization of milk produced by nontuberculous cattle and offered for sale, was heard February 3.

He then took up the question of respiratory diseases which is important because we have had reason to expect an increase of influenza before the winter is over. There has only been reported a slight increase thus far in this country and the hospitals have not been called upon to furnish care for many of these cases. The papers show that the epidemic of influenza is a serious menace in Europe and that this country may be invaded. It must be borne in mind that in the treatment of influenza, quarantine is futile, and that the individual problem should be taken into consideration on the onset of the symptoms, and proper care given. Hospitalization, however, is not generally desirable, and it is better for the patients if they can be kept at home. Physicians should keep in close touch with local and State Departments of Health in order to deal with an epidemic if it should assume definite proportions. He felt hopeful that the present condition was not so severe as authorities have reason to expect.

The executive of the American Public Health

Association, Mr. Galvin, was present and addressed the meeting. He congratulated the Association on its close coöperation with State and National Associations. It was questioned whether the National Association or the Massachusetts Association was the older, but this was unimportant since both are coöperating. He spoke of the movement of the National Association in its efforts to secure reorganization of the Public Health Service, because the present organization of the Public Health Service was not ideal, and with reference to this particular movement, he hoped there would be coöperation on the part of the Massachusetts Departments of Boards of Health.

The meeting was adjourned after a vote of thanks was given to the speakers.

SOCIETY MEETINGS DISTRICT MEDICAL SOCIETIES

Essex North District Medical Society

Wednesday, May 4, 1927—Annual meeting. Russell Hall Young Men's Christian Association Building, 40 Lawrence Street, Lawrence.

Thursday, May 5, 1927—Censors meet for examination of candidates at Hotel Bartlett, 95 Main Street, Haverhill, at 2 P. M.

Essex South District Medical Society

Wednesday, March 2, 1927—Lynn Hospital, Clinic, 5 P. M.; supper, 7 P. M. Dr. George Minot, "Feline Anemia, with Special Reference to Liver Diet." Discussion by Drs. Sargent of Salem and Reynolds of Danvers, ten minutes each.

Wednesday, April 6, 1927—Danvers State Hospital, Clinic, 5 P. M. Dr. Allan W. Rowe, Chief of Research Service at Evans Memorial, "The Differential Diagnosis of Endocrine Disorders." Followed by dinner. Discussion by Drs. Wood of Haverhill and Kline of Beverly ten minutes each.

Thursday, May 5, 1927—Censors meet for examination of candidates at the Salem Hospital, 3:30 P. M.

Gloucester. Speaker and subject to be announced later.

Wendell District Medical Society

Wednesday, May 11, 1927—Annual meeting. The Tavern Norfolk District Medical Society

Below are the proposed meetings of the Norfolk District for the remainder of the year. Minor changes may be made in case of necessity.

March 1, 1927—Roxbury Masonic Temple, 8:15 P. M. Dr. Robert B. Greenough. To be devoted to a talk on cancer, with a résumé of the results of colloidal lead treatment.

March 29, 1927—Roxbury Masonic Temple, 8:15 P. M. Drs. F. S. Newell and F. J. Irving, "The Modern Treatment of the Eclampsias and Toxaemias of Pregnancy." If time permits—"The Modern Methods of Handling Prospective Caesarean Cases."

May 10, 1927—Annual meeting. Details of meeting to be announced.

Suffolk District Medical Society

Meetings of the Suffolk District Medical Society and the Boston Medical Library will be held at the Boston Medical Library 8 The Fenway, Boston, at 8:15 P. M., as follows:

February 23, 1927—Surgical Section. "Clinic on Neurological Cases at the Peter Bent Brigham Hospital," Dr. Harvey Cushing.

March 30, 1927—Medical Section. Subject and speaker to be announced later.

April 27, 1927—Annual meeting. Election of officers. "Medical Education in the Orient and Occident," Dr. David L. Edsall Dean, Harvard Medical School.

Notices of meetings must reach the JOURNAL office on the Friday preceding the date of issue in which they are to appear.

BOOK REVIEWS

Shell Shock and Its Aftermath. By NORMAN FENTON, Ph.D. The C. V. Mosby Company, St. Louis, 1926. 173 pages.

Dr. Fenton, a psychologist now at Ohio University, was formerly closely associated with the so-called "Shell Shock Hospital" (Base Hospital 117), established in France by the American Expeditionary Forces. At this hospital, during the War, most of the cases of severe psychoneurosis were treated. Dr. Fenton, since re-

turning to this country, has analyzed very carefully the type of case observed in France and has shown that of 100 psychoneuroses developing in the front line trenches, it was only necessary to send 15 of them for treatment to Base Hospital 117, and of these 15, only one returned to the United States on account of his disability. The rate of cure, therefore, was very high in this hospital established very close to the front. Dr. Fenton also attempted to follow up some of the cases seen in France and was able to receive work from, or interview personally, a considerable number of them five or more years after the armistice. He found that there was a marked tendency to improvement among the men of this group as the years passed by, and that only a small number of them were still in need of care in government hospitals, in 1925. He gives many interesting tables and statistics in regard to these patients.

The study was aided by the National Committee for Mental Hygiene and Dr. Thomas W. Salmon, formerly Director of this committee, has written the introduction. The book can be highly recommended as a most excellent summary of this important military and civil problem.

Genius: Some Revaluations. By ARTHUR C. JACOBSON. New York, Greenberg, 1926, 160 pages.

This is a popular book showing that many men and women of outstanding ability in art, literature and other creative fields have been the victims of either alcoholism or tuberculosis. The author, who is a Brooklyn physician, would argue that both of these factors play a part in inciting, if not inaugurating, creative ideas of the highest order. He gives many examples to bear out his contention, but the whole essay is unbalanced and will not appeal as logical reasoning to the average physician.

Chronic Rheumatic Diseases. Their Diagnosis and Treatment. By F. G. THOMSON, M.A. Cantab., M.D., R.F.C.P. Lond., Physician to the Royal United Hospital, Bath; Consulting Physician to the Royal Mineral Water Hospital, Bath, etc., and R. G. GORDON, M.D., D.Sc., M.R.C.P. Edin., Physician to the Royal Mineral Water Hospital, Bath; Physician to the Children's Orthopaedic Hospital, Bath; Assistant Physician to the Royal United Hospital, Bath. Humphrey Milford, Oxford University Press, Edinburgh.

In this book of 200 pages the authors, who are physicians to the Royal Mineral Water Hospital and the Royal United Hospital of Bath, England, strive to present the most reliable modern views as to the etiology and treatment of the so-called chronic rheumatic diseases. They believe that present knowledge is insuffi-

cient to warrant a new and definite classification, but they divide the group into infective arthritis, osteoarthritis, gout and chronic fibrositis. They are convinced that a diathesis and an hereditary tendency is a common background and that infection, trauma and arteriosclerotic changes in the articular vessels are the exciting causes, with static defects as secondary factors. One could wish for reference to the proof of the truth of certain rather dogmatic statements, but in general the authors take a broad and sane view of the morphology and therapy of these difficult and crippling and prevalent conditions. A very conservative attitude is taken towards the results of treatment in all but the early cases. This attitude seems to us too gloomy, especially toward the symptomatic relief of osteoarthritis. The book is a useful review of the subject by medical men of wide clinical experience and should be helpful to the general practitioner.

Ophthalmic Year Book. Volume 22—1926.

A volume of 315 pages containing bibliography, digests, and indexes of the literature of ophthalmology for the year 1925. Edited by William H. Crisp, M.D., with a collaboration of thirty-three others. Published by the Ophthalmic Publishing Company, Chicago, Illinois. U. S. A.

The year book as its name implies is published yearly. It is of the greatest convenience to all ophthalmologists as it gives the most complete and concise review of the year's literature and is of enormous value as a reference. The present volume is excellent and in every way equals the high standard set by its predecessors.

An Introduction to the Practice of Preventive Medicine. By J. G. FITZGERALD, M.D., LL.D., F.R.C.S. Professor of Hygiene and Preventive Medicine and Director, School of Hygiene and Connaught Laboratories, University of Toronto. Second Edition. St. Louis. The C. V. Mosby Company. 1926.

This is the second edition of a book in which many persons on both sides of our northern border have been accustomed to find needed help when confronted with practical problems in public health.

Developments with respect to immunization against diphtheria and scarlet fever are not the only matters in which added knowledge has been acquired in preventive medicine since the first edition appeared in 1922. In order to incorporate up to date information some chapters have been largely rewritten and elsewhere material has been rearranged to a decided advantage to the student. The author reminds us that practical instruction in preventive medicine is now required for a medical degree in the University of Toronto.

In the compilation of the book the author acknowledged personal assistance from many sources and each chapter is followed by a valuable list of references.

Birth Control and the State. By C. P. BLACKER, M.C., M.A., M.R.C.S., L.R.C.P. Published by E. P. Dutton & Company, New York. 87 pages. Price \$1.00.

This monograph considers the question of the desirability of disseminating, through proper channels, knowledge of contraceptive measures. The arguments against and in favor of birth control are summarized and commented upon by the author, who believes that by teaching married women of the lower classes how to limit the number of their children, the happiness of the poorer people will be increased, the economic burden now placed upon the middle classes will be decreased, and the pressure of overpopulation as one cause of war will be done away with.

These views are stated clearly and are supported by excellent logic.

A Manual of Pharmacology and Its Application to Therapeutics and Toxicology. By THORALD SOLLMANN, M.D., Professor of Pharmacology and Materia Medica in the School of Medicine of Western Reserve University, Cleveland. Third Edition; entirely reset. 1184 pages. Philadelphia and London: W. B. Saunders Company, 1926.

The present reviewer has used the second or last previous edition of this book extensively and with great satisfaction, finding in it clearly stated and judiciously interpreted information as to established facts, supplemented by admirable concise abstracts and evaluations of special publications on points in question. The present edition retains the virtues of the previous one in increased measure and also contains new matter incident to the advance of our knowledge. Many parts have been rewritten or rearranged, and the useful plan of printing in ordinary type the more essential material but of supplying in smaller type much additional information of interest to the more searching reader has been followed more consistently. The new or newly extended subjects include, among others, insulin, ethylene, parathyroid hormone, thyroxin and the vitamins. Throughout the volume a conspicuous feature is the painstaking reference to original publications, a bibliography of which, given at the end, occupies nearly a hundred pages. Thus the book is fitted to meet not only the requirements of the ordinary student and clinician but also those of the advanced student who may need a key to the original literature.